Issuance Date: DRAFT
Effective Date: DRAFT
Expiration Date: DRAFT

AIR OPERATING PERMIT No. 0000850

In compliance with the provisions of
The State of Washington
Clean Air Act Chapter 70A.15 Revised Code of Washington

WestRock CP, LLC
801 Portland Avenue
Tacoma, Washington 98421

Is authorized to operate in accordance with the terms and conditions of this permit.

Issued by:
State of Washington
DEPARTMENT OF ECOLOGY
300 Desmond Drive
PO Box 47600
Olympia, WA 98504-7600

Emily Toffol, P.E. Environmental Engineer Solid Waste Management Program	James DeMay, P.E. Industrial Section Manager Solid Waste Management Program

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INTRODUCTION AND LEGAL AUTHORITY

This Air Operating Permit (AOP) is authorized under the Operating Permit Regulation, Chapter 173-401 WAC. The provisions of this Permit describe the emissions limitations, operating requirements, monitoring and recording requirements, and reporting frequencies for the permitted source.

The WestRock CP, LLC's Kraft mill in Tacoma (Tacoma Mill), formerly RockTenn and Simpson Tacoma Kraft, LLC, requires a Title V AOP because it emits or has the potential to emit, one hundred tons per year or more of one or more air pollutants [WAC 173-401-300(1)].

Compliance with underlying requirements shall be demonstrated using the methods specified in this permit. The Permittee shall submit a Report of Compliance Certification of the terms and conditions contained in this permit as required in General Condition 43, including certification of compliance with all applicable requirements.

The Title V AOP consists of all parts of this assembled document, including all Appendices, but does not include the accompanying Statement of Basis, nor the Title V permit application materials submitted by Tacoma Mill, nor any other past orders or permits.

The definition of terms contained in WAC 173-401-200, and as defined in all referenced regulations, applies to this permit unless otherwise defined in the permit. All terms and conditions except state only requirements are enforceable under the Federal Clean Air Act (FCAA). State only requirements are specifically identified in the permit.

EMISSION UNIT SPECIFIC REQUIREMENTS
[WAC 173-401-600]

The emission units covered by conditions A through Q are subject to the following emission limits, and monitoring and reporting requirements. These units are also subject to the facility wide applicable requirements and the associated monitoring, recordkeeping and reporting requirements for these limits in the Facility Wide section of this permit. Unless specified otherwise, the basis of authority for the type and frequency of monitoring imposed in conditions A through Q is WAC 173-401-615 or WAC 173-401-630(1).

Insignificant emission units (IEUs) are subject to the applicable requirements contained in the Facility Wide section, however they are not subject to testing, monitoring, recordkeeping, or reporting unless the generally applicable requirements in the State Implementation Plan (SIP) impose them [WAC 173-401-530(2)(c)].

The reference test method (RM) or compliance determination algorithm is identified in or referenced in the column titled "Monitoring and Reporting". These algorithms set forth the manner by which emissions are calculated for those requirements for which the Reference

Method itself does not directly result in an emissions estimate. The Permittee may use an equivalent method with prior written approval from Ecology.

A. RECOVERY FURNACE NO. 4 (RF4)

The WestRock Tacoma Mill shall comply with the applicable requirements of 40 CFR Part 60 Subparts A, BB, and Db (NOx only), and 40 CFR Part 63 Subpart MM for Recovery Furnace No. 4, which include the following general requirements:

40 CFR 60.7(b) & (f) concerning record keeping,
40 CFR 60.7(c), (d) & (e) concerning reporting,
40 CFR 60.11(d) concerning operation and maintenance,
40 CFR 60.12 concerning concealment,
40 CFR 60.13 concerning monitoring, and
40 CFR 60.19 concerning notification and reporting.
40 CFR Part 63, Table 1 of Subpart MM

Condition	Parameter	**Limit** (shall not exceed)	Monitoring & Reporting	Applicable Requirements
A.1a	Particulate Matter (PM)	0.044 gr/dscf @ 8% O_2	EPA Method 5 is the reference test method, except water shall be used as the cleanup solvent instead of acetone in the sample recovery procedure. The test will consist of at least three runs. Each run shall be at least 60 minutes and 31.8 dscf. The particulate concentration shall be corrected to the appropriate oxygen concentration according to 40 CFR 60.284(c)(3). Sample at least once per calendar year. See Appendix G, No. 1 for tiered testing allowance. The Permittee must notify Ecology at least 30 days prior to performing the stack test. See Facility-Wide General Requirements, Condition 35 for reporting requirements.	40 CFR 60.282(a)(1)(i) and NOC Order 99QIS-94 for limit 40 CFR 60.285(b)(1) for testing requirements 40 CFR 64.2 and 64.6 through 64.9 for respective PM CAM monitoring and reporting/recordkeeping applicability 40 CFR 60.8(d) for notification requirement

Condition	Parameter	**Limit** (shall not exceed)	Monitoring & Reporting	Applicable Requirements
			Ongoing compliance with this condition is demonstrated by compliance with condition A.8b (CAM).	WAC 173-405-072 for source test reporting
A.1b	PM	0.10 gr/dscf @ 8% O_2, averaged over three one hour tests	Same as for previous limit.	Same as previous permit condition, except WAC 173-405-040(1)(a) for limit
A.1c	PM (Opacity Surrogate)	Excess emissions greater than 35% opacity (six minute average) for six percent of the total possible contiguous periods of excess emission in quarter	EPA Method 9 is the reference test method. Monitor continuously using a COMS that conforms to 40 CFR Part 60, Appendix F and Appendix B, Performance Specification 1. Span of the system shall be set at 70 percent opacity. See No. 3 in Appendix B of this AOP for data recovery requirements. See Facility-Wide General Conditions, No.37 for data assessment reporting. The percent of the total number of possible contiguous periods of excess emissions in a quarter (excluding periods of startup, shutdown, or malfunction and periods when the facility is not operating) during which excess emissions occur exceeding six percent of average opacities is indicative of a violation of §60.11(d).	40 CFR 60.282(a)(1)(ii) and NOC Order No. DE 99AQIS-94 for the opacity limit 40 CFR 60.284(a)(1) for COMS operational parameters 40 CFR 60.284(d)(1)(ii) for excess emissions definition 40 CFR 60.284(e)(ii) for excess emissions allowance 40 CFR 60.284(d) and 60.7(c) for reporting requirements

Condition	Parameter	**Limit** (shall not exceed)	Monitoring & Reporting	Applicable Requirements
			Excess emissions are all 6-minute average opacities that exceed 35 percent. The Permittee must submit a *Semi-Annual Excess Emissions and Continuous Monitoring Systems Performance Report* or *Summary Report* in accordance with 40 CFR 60.7(c) and 40 CFR 60.284(d), postmarked by the 30th day following the end of each six-month period (or on a more frequent basis in accordance with the criteria in 40 CFR 60.7(c)).	40 CFR 60.13(e)(1) for data sampling requirement
A.1d	Particulate Matter (Opacity Surrogate)	(when firing or co-firing oil) Average 20% for more than 6 consecutive minutes in any 60 minute period except for one 6-minute period per hour of not more than 27%	Method 9 is the reference test method. Monitor continuously using a COMS that conforms to 40 CFR Part 60, Appendix F and Appendix B, Performance Specification 1. See 1 in Appendix B of this AOP for data recovery requirements. See Facility-Wide General Conditions, No.37 for data assessment reporting. Maintain records of when oil is fired or co-fired. Report periods of excess emissions monthly. Opacity limit applies at all times, except during periods of startup, shutdown, or malfunction.	Order No. 99AQIS-94

Condition	Parameter	**Limit** (shall not exceed)	Monitoring & Reporting	Applicable Requirements
A.2a	SO_2	150 ppm @ 8% O_2, 30-day rolling average	EPA Method 6 is the reference test method. Monitor continuously using an approved CEMS that conforms to 40 CFR Part 60, Appendix F and Appendix B, Performance Specification 2. See 1 in Appendix B of this AOP for data recovery requirements. See Facility-Wide General Conditions, No.37 for data assessment reporting. Report 30-day averages and excess emissions monthly.	Order No. 01AQIS-3114 (BACT limit)
A.2b	SO_2	500 ppm @ 8% O_2, hourly average	Same monitoring as for previous limit. Report hour maximum in the monthly report.	WAC 173-405-040(9)(a) for limit. WAC 173-401-615 for monitoring
A.2c	SO_2	669 tons/year as 12-month rolling total	Report 12-month rolling total monthly.	Order No. DE 01AQIS-3114 (limit makes potential to emit assumptions enforceable)
A.3	Opacity	Average 35% for more than 6 consecutive minutes in any 60 minute period.	Department of Ecology (DOE) Test Method 9B is the reference test method. Monitor continuously using a COMS that conforms to 40 CFR Part 60, App B, Performance Specification 1.	WAC 173-405-040(6) for limit

Condition	Parameter	**Limit** (shall not exceed)	Monitoring & Reporting	Applicable Requirements
			See 1 in Appendix B of this AOP for data recovery requirements. Report periods of excess emissions monthly.	
A.4a	NO_X	85 ppm @ 8% O_2, 30-day rolling average	EPA Methods 7, 7A, 7B, or 7E are the reference test methods. Monitor ongoing compliance continuously using a CEMS conforming to 40 CFR 60, Appendix F and Appendix B, Performance Specification 2. See 1 in Appendix B of this AOP for data recovery requirements. See Facility-Wide General Conditions, No.37 for data assessment reporting. Report 30-day rolling average for each operating day of the month and excess emissions monthly.	Order No. 99AQIS-94 (BACT limit)
A.4b	NO_X	515 tons/year as 12-month rolling total (as NO_2)	Calculate NO_X mass emissions using the algorithm in footnote a of this table. Report 12-month rolling total monthly.	Order No. DE 01AQIS-3114 (limit makes potential to emit assumptions enforceable)
A.4c	NO_x	Maintain annual oil capacity factor less than 10% so that 40 CFR	Maintain records of black liquor and oil firing rate. Use the following equation: Cap Factor (%) = (lb oil fired/year) (H_O) (100) /[1.1(142,080 lb BLS/hr)(H_{BLS})(8760 hr/year)].	Order No. 99AQIS-94, 40 CFR 60.44b(c) for capacity factor limit, calculations, and recordkeeping

Condition	Parameter	**Limit** (shall not exceed)	Monitoring & Reporting	Applicable Requirements
		60.44b NO_X limit not applicable	Use values of 6,000 Btu/lb BLS as H_{BLS} and 18,000 Btu/lb RFO for H_O. Report 12-month rolling average oil capacity factor monthly. Permittee shall maintain records, in a form suitable for inspection, of the following for at least five years after the date of taking such records: Amounts of each fuel combusted during each day and calculated annual capacity factor for residual oil, calculated on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month.	40 CFR 60.49b(d) for reporting requirements
A.5a	CO	400 ppm @ 8% O_2, 30-day rolling average	EPA Methods 10, 10A, or 10B are the reference test methods. Monitor continuously using an approved CEMS that conforms to 40 CFR Pt. 60, Appendix F and Appendix B, Performance Specification 4. See 1 in Appendix B for data recovery requirements. See Facility-Wide General Conditions, No.37 for data assessment reporting. Report 30-day averages and excess emissions monthly.	Order No. 01AQIS-3114 (BACT limit)

Condition	Parameter	**Limit** (shall not exceed)	Monitoring & Reporting	Applicable Requirements
A.5b	CO	1672 tons/year as 12-month rolling total	Report 12-month rolling total monthly.	Order No. 01AQIS-3114 (limit makes potential to emit assumptions enforceable)
A.6	VOC	0.50 lb/ton black liquor solids	Sample once per calendar year using EPA Method 25A or equivalent. Use the average of 3 one hour runs. The Permittee must notify Ecology at least 30 days prior to performing the stack test. See Facility-Wide General Requirements, Condition 35 for reporting requirements.	Order No. 01AQIS-3114 (BACT limit) WAC 173-400-105(4) for Ecology given opportunity to be present at source test
A.7	TRS	Excess emission greater than 5 ppm by volume on a dry basis, corrected to 8% O_2, 12 hour average for one percent of the total possible contiguous periods of excess emissions in a quarter.	Monitor continuously using an approved CEMS that conforms to 40 CFR Part 60, Appendix F and Appendix B, Performance Specification 5. See 3 in Appendix B of this AOP for data recovery requirements. See Facility-Wide General Conditions, No.37 for data assessment reporting. The CEMS span is to be set to 30 ppm TRS. Calculate and record on a daily basis 12-hour average TRS and oxygen concentrations for two consecutive periods of each operating day. Each 12-hour average shall be determined as the arithmetic mean of the appropriate 12 contiguous 1-hour average TRS concentrations provided by the CEMS using the following equation:	40 CFR 60.283(a)(2) for limit 40 CFR 60.284(a)(2) for CEMS requirement 40 CFR 60.284(c)(1) for averaging period and recording 40 CFR 60.284(d)(1)(i) for excess emissions definition

Condition	Parameter	**Limit** (shall not exceed)	Monitoring & Reporting	Applicable Requirements
			$C_{corr} = C_{meas} \times (21 - 8)/(21 - Y)$ where: C_{corr} = the concentration corrected for oxygen. C_{meas} = the concentration uncorrected for oxygen. Y = the measured 12-hour average volumetric oxygen concentration. Periods of excess emissions reported under paragraph (d) of 40 CFR 60.284 are not indicative of a violation of §60.11(d) provided that the percent of the total number of possible contiguous periods of excess emissions in a quarter (excluding periods of startup, shutdown, or malfunction and periods when the facility is not operating) during which excess emissions occur does not exceed one percent. Excess emissions are any 12-hour average TRS concentration corrected to 8% oxygen that exceeds 5 ppm by volume. The Permittee must submit a *Semi-Annual Excess Emissions and Continuous Monitoring Systems Performance Report* or *Summary Report* in accordance with 40 CFR 60.7(c) and 40 CFR 60.284(d), postmarked by the 30th day following the end of each six-month	40 CFR 60.284(e)(1)(i) for excess emissions allowance 40 CFR 60.284(d)(i) and 60.7(c)for reporting

Condition	Parameter	**Limit** (shall not exceed)	Monitoring & Reporting	Applicable Requirements
			period (or on a more frequent basis in accordance with 60.7(c)).	
A.8a	HAP Metals (PM as a surrogate)	PM surrogate: 0.044 gr/dscf @ 8% O_2	EPA Method 5 is the reference test method. Each run must be at least 60 minutes with a sample volume of 31.8 dscf. Water must be used as the cleanup solvent instead of acetone in the sample recovery procedure. Sample every five years. See Appendix G, No. 2 for notification, submission of site-specific test plan, testing, and reporting requirements. Ongoing compliance of this condition is demonstrated by compliance with condition A.8b.	40 CFR 63.865(b)(1) for reference test method and water requirement 40 CFR 63.862(a)(1)(i)(A) for PM surrogate HAP limit
A.8b	HAP Metals (Opacity Surrogate)	Opacity greater than 35% while spent pulping liquor is being fed for 2% of operating time during a semiannual period.	Monitor opacity using a COMS which is installed, calibrated, maintained, and operated in accordance with Performance Specification 1 (PS-1) in Appendix B to 40 CFR Part 60 and the provisions in §63.6(h) and 63.8 and §63.864(d)(3) and (4). The Permittee is required to implement corrective action when a monitoring exceedance occurs. A monitoring exceedance occurs when the average of any 10 consecutive 6-minute averages exceed 20%. A violation occurs when opacity exceeds 35% for 2% of the operating time or more during a semiannual period.	40 CFR 63.864(k)(2)(i) for violation definition 40 CFR 63.864(d) for monitoring 40 CFR 63.864(k)(1)(i) for corrective action and definition of a monitoring exceedance 40 CFR 63.866 for recordkeeping requirements

Condition	Parameter	**Limit** (shall not exceed)	Monitoring & Reporting	Applicable Requirements
			The Permittee is required to keep the following records: 1) Black liquor solid firing rates 2) Any period of time when the monitoring exceedance occurred. 3) A brief explanation of the cause of the monitoring exceedance. 4) The time corrective action was initiated and completed. 5) The corrective action taken. Report exceedances and corrective actions monthly to Ecology. The Permittee must submit a *Semi-Annual Excess Emissions and Continuous Monitoring Systems Performance Report* or *Summary Report* in accordance with 40 CFR 63.10(e)(3)(v) and 40 CFR 63.867(c), delivered or postmarked by the 30th day following the end of each calendar half. See 2 in Appendix B of this AOP for data recovery requirements.	40 CFR 63.867(c) for semiannual excess emissions reports 40 CFR 63.1(e)(3)(v) for semiannual excess emissions report due date
A.8c	HAPS	N/A	The Permittee must maintain proper operation of the electrostatic precipitator's automatic voltage control (AVC).	40 CFR 63.864(e)(1) for AVC requirement 40 CFR 63.866(c)(8) for recordkeeping

Condition	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
			The Permittee must maintain records demonstrating compliance with the requirement to maintain proper operation of an electrostatic precipitator AVC.	

a. NO_X mass emission algorithm

$$NO_x(ton) = \frac{lb\ BLS}{day} \times days\ of\ operation\ \times \frac{87.5\ DSCF\ @\ 8\%\ O_2}{lb\ BLS} \times avg\ NO_x\ (ppm\ @\ 8\%\ O_2) \times \frac{46\ lb\ NO_x}{385\ dscf\ NO_x} \times \frac{\text{ton NO}_x}{2000\ \text{lbs NO}_x}$$

Where $\frac{87.5\ DSCF\ @\ 8\%\ O_2}{lb\ BLS}$ is calculated as shown below

$$\frac{87.5\ DSCF\ @\ 8\%\ O_2}{lb\ BLS} = F\ \times \frac{HHV}{1{,}000{,}000} \times O_2\ correction$$

Where:

$$F = 9000\ \frac{DSCF}{million\ BTU} @\ O\%\ O_2$$

$$HHV = 6000\ \frac{BTU}{lb\ BLS}$$

$$O_2\ correction = \frac{20.9 - 0}{20.9 - 8}$$

Reference: NCASI Technical Bulletin No. 646, pg. 16 [Order No. DE 01AQIS-3114]

The following **state-only** requirements are not federally enforceable under the Federal Clean Air Act.

Condition	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
A.9	TRS	5 ppm @ 8% O_2, daily average	Monitor same as A.7, except report daily average monthly. See Appendix B, No. 1 for data recovery requirements.	WAC 173-405-040(1)(c)

B. SMELT TANK NOS. 4E & 4W

The emission unit shall comply with the General Requirements of 40 CFR Part 63 as listed in Table 1 of Subpart MM.

Condition	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
B.1	PM	1.5 lb/10,000 lbs (0.3 lb/ton) black liquor solids fired at associated recovery furnace	EPA Method 5 or Ecology Method 8 is the reference test method. A test shall consist of a minimum of three runs on each stack with a sample time of at least one hour per run. Water shall be used as the cleanup solvent instead of acetone in the sample recovery procedure. Stack test at minimum once per calendar year. See Appendix G, No.1 for tiered testing allowance. Ongoing compliance of this condition is demonstrated by compliance with condition B.3b (CAM). The Permittee must notify Ecology at least 30 days prior to performing the stack test. See Facility-Wide General Requirements, Condition 35 for reporting requirements.	WAC 173-405-040(2) for limit WAC 173-400-105(4) for Ecology given opportunity to be present at source test 40 CFR 64.2 and 64.6 through 64.9 for respective PM CAM monitoring and reporting/recordkeeping applicability

Condition	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
B.2	Opacity	Average 35% for more than 6 consecutive minutes in any 60 minute period	DOE Test Method 9B is the reference test method. Ongoing compliance of this condition is demonstrated by compliance with condition B.3b (CAM).	WAC 173-405-040(6) for limit 40 CFR 64.2 and 64.6 through 64.9 for respective CAM monitoring and reporting/recordkeeping applicability
B.3a	HAP Metals (Particulate Matter Surrogate)	PM surrogate: 0.10 kg/Mg (0.20 lb/ton) of black liquor solids fired (dry basis)	EPA Method 5 is the reference test method. A test shall consist of a minimum of three runs on each stack. Each run must be at least 60 minutes with a sample volume of 31.8 dscf. Water must be used as the cleanup solvent instead of acetone in the sample recovery procedure. Sample every five years. See Appendix G, No. 2 for notification, submission of site-specific test plan, testing, and reporting requirements. Ongoing compliance of this condition is demonstrated by compliance with Condition B.3b.	40 CFR 63.865(b)(1) for reference test method and water requirement 40 CFR 63.862(a)(1)(i)(B) for PM surrogate HAP limit 40 CFR 63.864(e)(10) for monitoring requirements 40 CFR 63.865(b)(6) for dry basis of black liquor solids

Condition	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
B.3b	HAP Metals (Scrubber operating limits as Surrogate)	Five monitoring parameter values for either fan amperage or scrubbing liquid flowrate below the minimum operating limits during any semiannual reporting period	Maintain fan power use at 60 amps or greater on the east smelt tank and scrubber flow rate at 35 gpm or greater at the east smelt tank based on June 10, 2021 performance test. Maintain fan power use at 58 amps or greater on the west smelt tank and scrubber flow rate at 35 gpm or greater at the west smelt tank based on June 10, 2021 performance test. Maintain the scrubber flow rate (3-hr block average) at the East and West scrubber at or above the level established during the performance test as specified under 40 CFR 63.864(j)(5)(i)(A). Maintain fan operations (3-hr block average) at or above the levels established during the performance test as specified under 40 CFR 63.864(j)(5)(i)(B)(1)-(3). Continuously monitor fan power use (amps) and scrubber flow (gpm) with a continuous parameter monitoring system that records amps and flow at least once every successive 15-minute period. The device used for flow measurement must be accurate to within 5% of the design scrubbing liquid flow rate. Begin corrective action when any 3-hr block average is below the minimum fan amps or scrubber flow	40 CFR 63.864(e)(10) for monitoring requirements 40 CFR 63.864(e) for monitoring 40 CFR 63.864(k)(1) for corrective action 40 CFR 63.864(k)(2)(iv) for violation definition 40 CFR 63.864(k)(3) for number of exceedances per period 40 CFR 63.864(j)(5)(i) for scrubber flow rate 40 CFR 63.864(j)(5)(i)(B)(1)-(3) for establishing operating limits for scrubber fan 40 CFR 63.864(j) for replacement operating limits

Condition	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
			requirements established using the procedures of 40 CFR 63.864(j) when spent pulping liquor is fed. A violation occurs when 6 or more 3-hr block averages are below the minimum operating limits established using the procedures of 40 CFR 63.864(j) for either fan amps or scrubber flow requirements during a 6 month reporting period. The Permittee may establish replacement operating limits during a performance test required in condition B.3a. See 3 in Appendix B for data recovery requirements. QAQC program per 40 CFR 63.8(d), Facility-wide General Requirements, Condition 45 for calibration of CPMS. See Appendix B, No. 2 for data recovery requirements The Permittee is required to keep the following records: 1) Fan power use in amps and scrubber flow rate in gpm. 2) Any period of time when operating parameters are inconsistent of levels established during performance test. 3) A brief explanation of the cause of the monitoring exceedance. 4) The time the corrective action was initiated and completed.	40 CFR 63.866 for recordkeeping requirements 40 CFR 63.867(c) for semiannual excess emissions reports 40 CFR 63.1(e)(3)(v) for semiannual excess emissions report due date

Condition	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
			5) The corrective action taken. For the purpose of determining the number of exceedances, no more than one exceedance can occur per 24 hour period. The Permittee must submit a *Semi-Annual Excess Emissions and Continuous Monitoring Systems Performance Report* or *Summary Report* in accordance with 40 CFR 63.10(e)(3)(v) and 40 CFR 63.867(c), delivered or postmarked by the 30th day following the end of each calendar half.	

C. LIME KILN NOS. 1 & 2 (LK1 and LK2)

The emission unit shall comply with the General Requirements of 40 CFR Part 63 as listed in Table 1 of Subpart MM.

Condition	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
C.1	PM	0.13 gr/dscf @ 10% O_2, one hour average	EPA Method 5 or DOE Method 8 is the reference test method. A test shall consist of a minimum of three runs with a sample time of at least one hour per run. Water shall be used as the cleanup solvent instead of acetone in the sample recovery procedure. Stack test at minimum once per calendar year. See Appendix G, No.1 for tiered testing allowance. The Permittee must notify Ecology at least 30 days prior to performing the stack test. See Facility-Wide General Requirements, Condition 35 for reporting requirements. Ongoing compliance of this condition is demonstrated by compliance with condition C.4b (CAM).	WAC 173-405-040(3)(a) for particulate matter limit WAC 173-400-105(4) for Ecology given opportunity to be present at source test WAC 173-405-040(8) for O&M requirements 40 CFR 64.2 and 64.6 through 64.9 for respective PM CAM monitoring and reporting/recordkeeping applicability
C.2	500 ppm @ 10% O_2, hourly average	500 ppm @ 10% O_2, hourly average	EPA Method 6c is the reference test method. Monitor continuously using a CEMS that conforms to 40 CFR Part 60, Appendix F and Appendix B, PS-2 Report the highest hourly average for the calendar month in each monthly report. See No. 1 in Appendix B of this AOP for data recovery requirements.	WAC 173-405-040(9)(a) for limit 40 CFR 70.6(c) for monitoring (sufficiency monitoring

Condition	Parameter	**Limit** (shall not exceed)	Monitoring & Reporting	Applicable Requirements
C.3	Opacity	Average 35% for more than 6 consecutive minutes in any 60 minute period	DOE Test Method 9B is the reference test method. Ongoing compliance of this condition is demonstrated by compliance with condition C.4b (CAM).	WAC 173-405-040(9)(a) for limit 40 CFR 70.6(c) for monitoring (sufficiency monitoring
C.4a	HAP Metals (PM surrogate)	PM surrogate: 0.15 g/dscm (0.064 gr/dscf) @ 10% O_2	EPA Method 5 is the reference test method. Each run must be at least 60 minutes with a sample volume of 31.8 dscf. Water must be used as the cleanup solvent instead of acetone in the sample recovery procedure. Sample every five years. See Appendix G, No. 2 for notification, submission of site-specific test plan, testing, and reporting requirements. Ongoing compliance of this condition is demonstrated by compliance with condition C.4b.	40 CFR 63.865(b)(1) for reference test method and water requirement 40 CFR 63.862(a)(1)(i)(C) for PM surrogate HAP limit 40 CFR 63.864(e)(10) for monitoring
C.4b	HAP Metals (Scrubber operating limits as Surrogate)	When lime mud is fed, five monitoring parameter values for either pressure drop or scrubbing liquid flowrate	For LK1: Maintain pressure drop greater than or equal to 19 inches of water column and scrubber flow greater than or equal to 273 gpm. Surrogate values based on September 25, 2020 Performance Test. For LK2: Maintain pressure drop greater than or equal to 27 inches of water column and scrubber flow greater than or equal to 246 gpm. Surrogate values based on September 28, 2020 Performance Test.	40 CFR 63.862(a)(1)(i)(C) for limit 40 CFR 63.864(j) for establishing replacement operating limits 40 CFR 63.864(e)(10) for monitoring

Condition	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
		below the minimum operating limits during any semiannual reporting period	Continuously monitor pressure drop and scrubber flow with a continuous parameter monitoring system that records pressure drop and flow at least once every successive 15-minute period. The device used for flow measurement must be accurate to within 5% of the design scrubbing liquid flow rate. The device used for measuring pressure drop must be accurate to within 2 inches of water gauge pressure. Begin corrective action when any 3-hr block average is below the minimum pressure drop or scrubber flow requirements established using the procedures of 40 CFR 63.864(j). A violation occurs when 6 or more 3-hr block averages are below the minimum operating limits established using the procedures of 40 CFR 63.864(j) for either pressure drop or scrubber flow requirements during a 6 month reporting period. The Permittee may establish replacement operating limits during a performance test required in condition C.4a. See 2 in Appendix B for data recovery requirements. QAQC program per 40 CFR 63.8(d), Facility-wide General Requirements, Condition 45 for calibration of CPMS. The Permittee is required to keep the following records:	40 CFR 63.864(k)(1)(ii) for corrective action 40 CFR 63.864(k)(2)(iv) for violation definition 40 CFR 63.864(k)(3) for number of exceedances per period 40 CFR 63.866 for recordkeeping requirements. 40 CFR 63.867(c) for semiannual excess emissions reports 40 CFR 63.1 (e)(3)(v) for semiannual excess emissions report due date

Condition	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
			1) CaO production rate at each lime kiln. 2) Pressure drop and scrubber flow rate. 3) Any period of time when operating parameters are inconsistent with levels established during performance test. 4) A brief explanation of the cause of the exceedance. 5) The time the corrective action was initiated and completed. 6) The corrective action taken. For the purpose of determining the number of exceedances, no more than one exceedance can occur per 24 hour period. The Permittee must submit a *Semi-Annual Excess Emissions and Continuous Monitoring Systems Performance Report* or *Summary Report* in accordance with 40 CFR 63.10(e)(3)(v) and 40 CFR 63.867(c), delivered or postmarked by the 30th day following the end of each calendar half.	

The following **state-only** requirement is not federally enforceable under the Federal Clean Air Act:

Condition	Parameter	**Limit** (shall not exceed)	Monitoring & Reporting	Applicable Requirements
C.5a	TRS	20 ppm @ 10% O_2, daily average	Monitor continuously using an approved CEMS that conforms to 40 CFR Part 60, App B, Performance Specification 5. See 1 in Appendix B of this AOP for data recovery requirements. Report daily averages and excursions monthly.	WAC 173-405-040(3)(c)
C.5b	TRS	80 ppm @ 10% O_2, more than two consecutive hours	Monitor continuously using an approved CEMS that conforms to 40 CFR Part 60, Appendix B, Performance Specification 5. See 1 in Appendix B of this AOP for data recovery requirements. Report exceedances monthly.	WAC 173-405-040(3)(b)

D. POWER BOILER NO. 6 (PB6)

The emission unit shall comply with the General Requirements of 40 CFR Part 63 as listed in Table 10 of Subpart DDDDD.

Condition	Parameter	**Limit** (shall not exceed)	Monitoring & Reporting	Applicable Requirements
D.1	PM	0.10 gr/dscf @ 7% O_2	EPA Method 5 or DOE Method 8 is the reference test method. A test shall consist of three one-hour runs. Unless otherwise approved in writing by Ecology, a source test must be performed in any month that the emission unit was operated more than 216 hours while burning oil. If	WAC 173-405-040(5)(c) for limit 40 CFR 70.6(c) for 0.80% ash content and source test frequency when

Condition	Parameter	**Limit** (shall not exceed)	Monitoring & Reporting	Applicable Requirements
			an emission unit is not operated for more than 216 hours in a month while burning oil, a source test must be performed prior to the emissions unit having been operated a total of 720 hours on oil since the end of the month of the last source test. See Facility-Wide General Requirements, Condition 35 for reporting requirements. Maintain records of daily fuel usage. Ongoing compliance indicated by maintaining ash content of all shipments of oil for use in Power Boiler No.6 at 0.80% by weight or less. Either: Analyze the ash content of all shipments of oil delivered to the Power Boiler No.6 fuel supply tank; OR Collect a sample of oil fed to Power Boiler No.6 every seventh (7^{th}) day it is fired with oil. If sampling every 7^{th} day, the first sample must be taken within 24 hours of feeding oil to Power Boiler No.6. In both cases use a test method approved by EPA or ASTM. Report results in the monthly report for months when shipments are received or sample is collected.	firing oil (sufficiency monitoring)

Condition	Parameter	**Limit** (shall not exceed)	Monitoring & Reporting	Applicable Requirements
D.2	Opacity	Average 20% for more than 6 consecutive minutes in any 60 minute period, except for emissions due to soot blowing or grate cleaning for up to 15 minutes in 8 consecutive hours	DOE Test Method 9B is the reference test method. When fuel oil is combusted the Permittee will perform visual opacity assessments within 24 hours of boiler startup and weekly thereafter. When burning natural gas the visual assessment is waived. Maintain records of daily fuel usage. If opacity is observed in excess of 20% for more than 6 consecutive minutes in a 60 minute period, the facility will take steps to identify and correct the causes of the opacity and within 24 hours conduct a visual assessment to confirm compliance. Results of all tests and any corrective actions taken will be reported in the monthly report immediately following when they were obtained.	WAC 173-405-040(6) for limit 40 CFR 70.6(c) for monitoring when burning oil (sufficiency monitoring)
D.3	SO_2	1000 ppm @ 7% O_2 hourly average	Maintain fuel receipts showing that all oil fired contained less than or equal to 2% sulfur. Maintain records of daily fuel usage.	WAC 173-405-040(9)(b) for limit 40 CFR 70.6(c) for monitoring
D.4	Steam Production	782,000 Klbs/year, 12-month rolling total	Monitor steam production. Report monthly production and 12-month rolling total monthly.	NOC Order No. 4153-AQ07

Condition	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
			Facility-wide General Requirements, Condition 45 for calibration of CPMS.	
D.5	Tune up	Once per every 5 years	Conduct a tune-up of the boiler or process heater every 5 years. The tune-up must meet the requirements specified in 40 CFR 63.7540 (a)(10)(i) through (vi). See D.8 below for additional requirement for maintaining reduced tune up frequency allowance. Maintain on-site and submit, if requested by the administrator, the following in a report: 1) The concentrations of CO in the effluent stream in parts per million by volume, the oxygen in volume percent, measured at high fire or typical operating load, before and after tune-up of the boiler 2) A description of any corrective actions taken as part of the tune-up 3) The type and amount of fuel used over the 12 months prior to the tune-up. Report as required in 40 CFR 63.7550(c)(1) in 5-year compliance report.	40 CFR 63.7540 for tune-up requirements, 40 CFR 63.7515 (d) for frequency 40 CFR 63.7540(a)(12) and (a)(10)(vi) for maintaining a report 40 CFR 63.7550(c)(1) for tune-up reporting requirements

Condition	Parameter	**Limit** (shall not exceed)	Monitoring & Reporting	Applicable Requirements
D.6.a	Notifications	N/A	Submit a notification within 48 hours of the declaration of a period of natural gas curtailment or supply interruption during which the Permitee intends to burn fuel other than gas 1. The notification must include the reason why you are unable to use the natural gas or equivalent, including the date then the natural gas curtailment was declared or the supply interruption began, the type of alternative fuel you intent to use, and the dates when alternative fuel use is expected to begin. Entering into a contractual agreement with a natural gas supplier for curtailment purposes or an increase in the cost of natural gas due to market fluctuations does not meet the definition of a period of gas curtailment or supply interruption. The Permittee must keep records of the total hours per calendar year that an alternative fuel is burned and the total hours per calendar year that the unit operated during periods of gas curtailment or supply emergencies.	40 CFR 63.7545(f) 40 CFR 63.7575 for definition of “period of gas curtailment or supply interruption” 40 CFR 63.7555(h), 63.7560 for recordkeeping requirements

Condition	Parameter	**Limit** (shall not exceed)	Monitoring & Reporting	Applicable Requirements
D.6b	Notifications	N/A	PB6 is a "unit designed to burn gas 1" per Boiler MACT. PB6 may burn liquid fuel for periodic testing of liquid fuel, maintenance, or operator training, not to exceed a combined total of 48 hours during any calendar year. If the Permittee intends to switch fuels or makes a physical change to the boiler and the fuel switch or physical change results in the applicability of a different subcategory, you must provide notice of the date upon which you switched fuels or made the physical change within 30 days of the switch/change. The notification must include: 1) The name of the owner or operator of the affected source, the location of the source, the boiler which switched fuels, or were physically changed, and the date of the notice. 2) The currently applicable subcategory under this subpart. 3) The date upon which the fuel switch or physical change occurred. The Permittee must keep records of the total hours per calendar year that an alternative fuel is burned and the total hours per calendar year that the unit operated during periods of gas curtailment or supply emergencies.	40 CFR 63.7575 for definition of "unit designed to burn gas 1" 40 CFR 63.7545 (h) for notification requirement 40 CFR 63.7555, 63.7560 for recordkeeping requirements

Condition	Parameter	**Limit** (shall not exceed)	Monitoring & Reporting	Applicable Requirements
D.7	Notifications and Reports	N/A	Submit a compliance report with information required from Table 9 in Subpart DDDDD of Part 63 at a minimum frequency of 5 years. Compliance reports must be submitted no later than January 31st for the 5-year reporting period January 1 through December 31. Keep records of compliance reports for five years.	40 CFR 63.7550 40 CFR 63.7555 63.7560 for recordkeeping requirements
D.8	Oxygen trim level (Work practice standard)	Oxygen trim system level no lower than the oxygen concentration measured during the most recent tune-up	In order to maintain reduced tune-up frequency in D.5 above, maintain the oxygen level for the oxygen trim system above the oxygen concentration measured during the most recent tune-up. Report excursion(s) of the oxygen concentration, including duration of the excursion(s) in the respective monthly air report. See 3 in Appendix B of this AOP for data recovery requirements.	63.7540(a)(12) for work practice standard requirement

E. POWER BOILER NO. 7 (PB7) and COGEN COOLING TOWER

Cogen Cooling Tower

Condition	Parameter	**Limit** (shall not exceed)	Monitoring & Reporting	Applicable Requirements
E.1	PM10	4 tons/year on a 12-	Demonstrate compliance through monthly calculation of emissions. The calculation will be based on cooling tower	PSD-06-02

Condition	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
		month rolling total, calculated monthly	operating factors, total dissolved solids (TDS), and tower design factors. The calculation procedure must be included in the operations and maintenance manual. The Permitee shall report in writing to Ecology exceedances of this limit which shall include: magnitude of excess from the emission limit, the duration of the excess, the probable cause, corrective actions taken or planned, and any agency contacted. Report monthly totals and rolling 12-month totals in units of tons in monthly reports.	

Power Boiler No. 7

The Permittee shall comply with the currently applicable requirements of 40 CFR Part 60 Subparts A and Db and 40 CFR Part 63 Subpart DDDDD for Power Boiler No. 7, which include the following general requirements:

40 CFR 60.7(b) & (f) concerning record keeping,
40 CFR 60.7(c), (d) & (e) concerning reporting,
40 CFR 60.11(d) concerning operation and maintenance,
40 CFR 60.12 concerning concealment,
40 CFR 60.13 concerning monitoring, and
40 CFR 60.19 concerning notification and reporting
40 CFR Part 63, Table 10 of Subpart DDDDD

Condition	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
E.2a	PM	0.05 gr/dscf @7% O_2	EPA Method 5 is the reference test method. A test shall consist of a minimum of three runs with a sample time of at least one hour per run. Stack test at minimum once per calendar year. See Appendix G, No.1 for tiered testing allowance. The Permittee must notify Ecology at least 30 days prior to performing the stack test. See Facility-Wide General Condition 35 for reporting requirements. Report test results and stack tested in monthly report. Ongoing compliance with condition is indicated by compliance with Condition E.3a (CAM).	WAC 173-405-040(5)(b) for limit WAC 173-400-105(4) for Ecology given opportunity to be present at source test 40 CFR 64.2 and 64.6 through 64.9 for respective PM CAM monitoring and reporting/recordkeeping applicability
E.2b	PM_{10} (filterable only)	0.020 lb/MMBtu on a calendar day basis	The Permittee shall source test in accordance with 40 CFR 60, Appendix A, EPA Method 1-5. Each test shall consist of three runs, with at least one hour for each run. Testing shall be performed annually between November 1 and April 30th. Testing shall be done at a boiler operating rate equal to or greater than 90% of the highest daily operating rate within the previous six months. A mix of fuels representative of the boiler's normal operation must be burned during the test.	PSD-06-02, for limit, stack testing requirements, and operation and maintenance manual PSD-06-02 TSD Table 1 footnote 3 for permitting assumption that all PM is PM_{10}

Condition	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
			Report test results as lb/MMBtu and gr/dscf @ 7% O2. See Facility-Wide General Condition 35 for reporting requirements. All PM measured is assumed to be PM_{10}. Ongoing compliance with condition is indicated by compliance with condition E.3a (CAM). In an operation and maintenance manual, the Permitee shall identify operational parameters and practices that will constitute "proper operational practices" relative to compliance with this permit condition. The manual must be available for review by Ecology upon request. Failures to follow the manual which result in excess emissions may be considered credible evidence that the event was caused by poor or inadequate operation or maintenance. The Permitee shall report in writing to Ecology exceedances of this limit which shall include: magnitude of excess from the emission limit, the duration of the excess, the probable cause, corrective actions taken or planned, and any agency contacted. All records pertaining to emissions must be retained for a period of not less than five years	40 CFR 64.2 and 64.6 through 64.9 for respective CAM monitoring and reporting/recordkeeping applicability PSD 06-02 for reporting limit exceedances and recordkeeping

Condition	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
E.2c	PM	0.085 lb/mmBtu, except during SSM periods	EPA Method 5 is the reference test method, except that the temperature of the sample gas in the probe and filter holder is monitored and is maintained at 160±14 °C (320±25 °F). A test shall consist of a minimum of three runs with a sample time of at least one hour per run. Stack test at minimum once per calendar year. See Appendix G, No.1 for tiered testing allowance. For determination of PM emissions, the oxygen (O2) or CO2 sample is obtained simultaneously with each run of Method 5 by traversing the duct at the same sampling location. Ongoing compliance with this condition is indicated by complying with condition E.3.a (CAM).	40 CFR 60.43b(h)(4) for limit 40 CFR 60.43b(g) for SSM exception 40 CFR 60.48b for testing requirements 40 CFR 64.2 and 64.6 through 64.9 for respective CAM monitoring and reporting/recordkeeping applicability
E.2d	PM	N/A	For informational purposes only, testing required under condition E.2b shall annually include 40 CFR Part 51 Appendix M Method 202 for the back half, or equivalent test method and methodology if approved in advance by Ecology.	PSD-06-02
E.2e	HAPs (Filterable PM surrogate)	0.037 lb/MMBtu of heat input	Performance testing will be in accordance with requirements specified in 40 CFR 63.7530(b) and Tables 4, 5 and 7 of Subpart DDDDD of Part 63. Operating limits	40 CFR 63.7500 and Table 2 of Subpart DDDDD for limit 40 CFR 63.7520 and Table 4, 5, and 7 to

Condition	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
			in Conditions E.2f and g must be confirmed or reestablished during performance tests. See Appendix G, No. 3 for notification, testing, testing frequency, recordkeeping, and reporting requirements. Ongoing compliance with this condition is demonstrated by compliance with Conditions E.2g, h, and i. Semi-annual compliance reporting required as specified by 63.7550.	Subpart DDDDD for performance testing requirements 40 CFR 63.7540 for confirming or reestablishing operating limits. 40 CFR 63.7550(c)(3), 63.7550(h), 63.7515(f) for recordkeeping and reporting requirements40 CFR 63.7545(d) for notification
E.2f	HAPs (Filterable PM surrogate)	Minimum operating condition (operating load)	Maintain the 30-day rolling average operating load such that it does not exceed 110% of the highest hourly average operating load recorded during the most recent performance test that demonstrated compliance with condition E.2f (Performance test 06/23/2020 set limit at 347 klb/hr). Develop a site-specific monitoring plans for the operating load CPMS that addresses design, data collection, and the quality assurance and quality control elements in 63.8(d) and the elements described in paragraphs d(1) and d(2) of 63.7505.	40 CFR 63.7520(c), Item 7 of Table 4 and 5.a. of Table 7 to 40 CFR 63 Subpart DDDDD for operating limits Items 10 of Table 8 to 40 CFR 63 Subpart DDDDD 40 CFR 63.7550 for reporting

Condition	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
			See Appendix B, No. 2 for data recovery requirements. Conduct a performance evaluation at the time of each performance test but no less frequently than annually for the operating load monitors or steam generation monitors. Records must be kept of monitoring data to show compliance with operating limit. Records of performance evaluations must be kept. Semi-annual compliance reporting required as specified by 63.7550. Report deviations in monthly report.	40 CFR 63.7505(d) for site-specific monitoring plan 40 CFR Part 63.7525(e)(4) for performance test evaluation requirement 40 CFR 63.7555, 63.7560 for recordkeeping WAC 173-401-615(3)(b) for monthly reporting of deviations.
E.2g	HAPs (Filterable PM surrogate)	Minimum operating condition (total secondary power)	Maintain the 30-day rolling average total secondary electric power of the electrostatic precipitator at or above the average hourly total secondary power measured during the most recent performance test that demonstrated compliance with condition E.2f (Last performance test 06/23/2020 set minimum at 29 kW for north precipitator cell, 30 kW for south precipitator cell). Develop a site-specific monitoring plan as in Condition E.2f, but for secondary power CPMS. Conduct performance evaluations as in Condition E.2g, but for secondary electric power monitoring system.	Same as above, except: 40 CFR 63.7520(c), Item 4.b of Table 4 and Item 1.b. of Table 7 to 40 CFR 63 Subpart DDDDD for operating limits and Item 7 of Table 8 to 40 CFR 63 Subpart DDDDD And the addition of:

Condition	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
			Recordkeeping and reporting as in Condition E.2g. See Appendix B, No. 2 for data recovery requirements.	40 CFR 63.7525(h) for performance test evaluation for electric power monitoring system
E.2h	PM_{10} (filterable only)	99 tons/year on a 12-month rolling total, calculated monthly	EPA Method 5 is the reference test method. Use the most recent result from the most recent compliance test performed for condition E.2b to determine the PM_{10} emission rate on monthly and 12-month rolling basis. Report monthly totals and rolling 12-month totals in units of tons in monthly reports. Ongoing compliance with condition is indicated by compliance with condition E.3a (CAM). In an operation and maintenance manual, the Permitee shall identify operational parameters and practices that will constitute “proper operational practices” relative to compliance with this permit condition. The manual must be available for review by Ecology upon request. Failures to follow the manual which result in excess emissions may be considered credible evidence that the event was caused by poor or inadequate operation or maintenance. The Permitee shall report in writing to Ecology exceedances of this limit which shall include: magnitude	PSD-06-02 for limit, operation and maintenance manual, reporting exceedances, and recordkeeping 40 CFR 64.2 and 64.6 through 64.9 for respective CAM monitoring and reporting/recordkeeping applicability.

Condition	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
			of excess from the emission limit, the duration of the excess, the probable cause, corrective actions taken or planned, and any agency contacted. All records pertaining to emissions must be retained for a period of not less than five years.	
E.3a	Opacity	10% average for more than 6 consecutive minutes in any 60 minute period.	DOE Test Method 9B is the reference test method. Ongoing compliance demonstrated by maintaining greater than 8 kilowatts of secondary power per side of the ESP, on a 3-hour block average, while burning solid fuel or solid fuel and natural gas. No secondary power is required when burning only natural gas. Should the Permittee wish to propose an additional set of surrogate monitoring parameters while routing all emissions through one side of the ESP, the Permitee must conduct a performance test from which surrogate monitoring parameters will be established. The Permittee must submit a test plan to Ecology 60 days prior to the date of the proposed test for review and written approval by Ecology. The results of the test plan must be submitted to Ecology 60 days after the date of the test with documentation of the proposed surrogate monitoring parameters. Ecology must approve the proposed surrogate monitoring parameters in writing. Once approved, the Permittee may route all emissions through one side of the ESP as long as the approved	NOC Order No. 4153-AQ07 for limit and monitoring 40 CFR 70.6(c) for 15-minute period (sufficiency monitoring) 40 CFR 64.2 and 64.6 through 64.9 for respective CAM monitoring and reporting/recordkeeping applicability

Condition	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
			surrogate parameter is maintained, on a 3-hour block average. See 1 in Appendix B for data recovery requirements. Report daily minimum 3-hour block average total secondary power per side and exceedances monthly. Facility-wide General Requirements, Condition 45 for calibration of CPMS. Data shall be monitored to collect total secondary power at least once every successive 15-minute period.	
E.3b	Opacity	When combusting wood or wood with other fuels: Average 20% for more than 6 consecutive minutes in any 60 minute period, except for one six minute	Same as for previous limit. Ongoing compliance with condition is indicated by compliance with Condition E.3a.	40 CFR 60.43b(f) for basis of limit 40 CFR 60.43b(g) for SSM 40 CFR 60.48b(j)(6) for alternative monitoring allowance, as approved by Ecology in letter dated 5/23/16

Condition	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
		period of not more than 27% opacity and except during periods of SSM		
E.3c	Opacity (visible emissions)	Average 20% for more than 6 consecutive minutes in any 60 minute period, except for exceptions or alternative standards in WAC 173-405-040	Same as for Condition E.3a.	WAC 173-405-040(6) for limit WAC 173-405-040(6)(b) for exceptions and alternative standards 40 CFR 64.2 and 64.6 through 64.9 for respective CAM monitoring and reporting/recordkeeping applicability
E.4a	NO_X	0.30 lbs/MMBTU, based on heat input	Monitor continuously using an approved CEMS that conforms to 40 CFR Part 60, Appendix F and Appendix B, Performance Specification 2, and 40 CFR 60.13. Operate	PSD 06-02

Condition	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
		value of the fuel, 30-day rolling average	the CEMs continuously except for breakdowns and repairs. Calculations must be made by multiplying the daily average concentration times daily heat input (MMBtu). The 30-day average emission rate must be calculated as the average of all hourly emissions data recorded by the monitoring system during the 30 operating day period. A new 30-day rolling average emission rate is calculated each operating day as the average of all of the hourly NO_X emission data for the preceding 30 operating days. Report daily averages, daily 30-day rolling averages, and maximum 30-day rolling average for the month in terms of lb/mmBTU. See 3 in Appendix B of this AOP for data recovery requirements. See Facility-Wide General Conditions, No. 37 for data assessment reporting. In an operation and maintenance manual, the Permitee shall identify operational parameters and practices that will constitute “proper operational practices” relative to compliance with this permit condition. The manual must be available for review by Ecology upon request. Failures to follow the manual which result in excess emissions may be considered credible evidence that the event was caused by poor or inadequate operation or maintenance. The Permitee shall report in writing to Ecology exceedances of this limit which shall include: magnitude	

Condition	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
			of excess from the emission limit, the duration of the excess, the probable cause, corrective actions taken or planned, and any agency contacted. All records pertaining to emissions must be retained for a period of not less than five years	
E.4b	NO_X	782 tpy as 12-month rolling total, calculated monthly	Calculate as in condition E.4a, but in tons on a monthly and 12-month rolling total basis in tons. Report monthly total and rolling 12-month total in monthly report in terms of tons. In an operation and maintenance manual, the Permitee shall identify operational parameters and practices that will constitute "proper operational practices" relative to compliance with this permit condition. The manual must be available for review by Ecology upon request. Failures to follow the manual which result in excess emissions may be considered credible evidence that the event was caused by poor or inadequate operation or maintenance. The Permitee shall report in writing to Ecology exceedances of this limit which shall include: magnitude of excess from the emission limit, the duration of the excess, the probable cause, corrective actions taken or planned, and any agency contacted.	PSD-06-02

Condition	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
			All records pertaining to emissions must be retained for a period of not less than five years	
E.4c	NO_X	Creosote treated wood shall not exceed 40% of the fuel mix, by weight, on a 30-day rolling average. [This is to assure that the PSD significance threshold is not exceeded]	The Permittee shall manage creosote treated wood as described in the Creosote Wood Management Plan. Fuel monitoring recordkeeping required by Condition E.13 and E.14. Report excursions from this requirement on a monthly basis.	Order No. 6161
E.5a	SO_2 from oil	0.5 lb/MMBTU, 30-day rolling average	Monitor continuously using an approved CEMS that conforms to 40 CFR Part 60 (July 1, 1992), Appendix F and Appendix B, Performance Specification 2. See 3 in Appendix B for data recovery requirements. See Facility-Wide General Conditions, No. 37 for data assessment reporting.	40 CFR 60.42b(e) for avg period 40 CFR 60.42b(k)(1) for limit 40 CFR 60.47b(a) for CEMS requirement

Condition	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
			Calculate rolling average daily by methods in 40 CFR 60.47b(b). Report calculation results monthly and maximum monthly rolling average.	40 CFR 60.49b(j) and (k) for reporting requirements 40 CFR 60.47b(b) for alternative oil sampling algorithm for deriving emissions
E.5b	SO_2	1) 220 lbs/hr, 1 hour average 2) 383 tons/yr., 12 month rolling total 3) Fuel oil ≤ 2% sulfur by weight 4) 10% annual capacity factor from oil	1. Continuously monitor and log fuel use. Calculate the SO_2 emission rate using methods of calculation specified in the footnote of this table. Report daily maximum 1-hour averages, monthly maximum 1 hour averages, and exceedances monthly. 2. Report monthly total and 12 month rolling total monthly. Use the values calculated from No.1 above to calculate 12 month totals. 3. Collect a well-mixed sample from fuel oil tank(s) monthly. Use ASTM Method D129-118, D1552-16e1, D4057-19, or equivalent to determine %S content. Report result monthly. Alternatively, demonstrate compliance by maintaining fuel receipts which show %S content analyzed using one of the above methods. If demonstrating compliance using fuel records, all fuel delivered within the preceding 30 days (or the most recent delivery, if no fuel was delivered within the preceding 30 days) must contain sulfur analysis or the Permittee must demonstrate compliance via tank sampling. This requirement only	40 CFR 60.42b(d)(1) and NOC Order No. 4153-AQ07 for oil capacity factor limitation Footnote A1 of Order No. 4153-AQ07 for calculation of SO_2

Condition	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
			applies to periods of time during which oil is fired in Power Boiler No.7. 4. Fuel mass balance. Maintain records of fuel usage. Calculate and report annual oil capacity factor monthly. Facility-wide General Requirements, Condition 45 for calibration of CPMS.	
E.5c	SO_2	1000 ppm @ 7% O_2, hourly average	Maintain fuel receipts showing that all oil fired was less than or equal to 2% sulfur. Maintain records of daily fuel usage.	WAC 173-405-040(9)(b)
E.6a	CO	0.35 lb/MMBtu on a 30-day rolling average	Monitor continuously using an approved CEMS that conforms to 40 CFR Part 60 Appendix F and Appendix B, Performance Specification 4, and 40 CFR 60.13. Operate the CEMs continuously except for breakdowns and repairs. Calculations must be made by multiplying the daily average concentration times daily heat input (MMBtu). The 30-day average emission rate must be calculated as the average of all hourly emissions data recorded by the monitoring system during the 30 operating day period. A new 30-day rolling average emission rate is calculated each operating day as the average of all of the hourly CO emission data for the preceding 30 operating days. Report daily averages, daily 30-day rolling averages, and	PSD-06-02

Condition	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
			maximum 30-day rolling average for the month in terms of lb/mmBTU. See 1 in Appendix B of this AOP for data recovery requirements. See Facility-Wide General Conditions, No.37 for data assessment reporting. Report daily averages, daily 30-day rolling averages, and maximum 30-day rolling averages monthly in monthly report in terms of lb/MMBtu. Monthly monitoring reports must include any occurrence of excess emissions recorded on a CEMS for Power Boiler #7, including the time, magnitude, duration, cause, and any corrective action. In an operation and maintenance manual, the Permitee shall identify operational parameters and practices that will constitute “proper operational practices” relative to compliance with this permit condition. The manual must be available for review by Ecology upon request. Failures to follow the manual which result in excess emissions may be considered credible evidence that the event was caused by poor or inadequate operation or maintenance. The Permitee shall report in writing to Ecology exceedances of this limit which shall include: magnitude of excess from the emission limit, the duration of the	

Condition	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
			excess, the probable cause, corrective actions taken or planned, and any agency contacted. All records pertaining to emissions must be retained for a period of not less than five years	
E.6b	CO	720 ppm by volume on a dry basis @ 3% O_2, 720 hour average	Monitoring is the same as E.6a and E.16. Demonstrate continuous compliance with the CO limit according to 63.7540(a)(8). Calculate 720 operating hour rolling averages based on 1-hour averages according to 63.7525(a)(5). Report deviations monthly. Conduct a performance evaluation of the CO CEMS in accordance to 63.7525(a). Notify Ecology 60 days before the performance test is scheduled to begin. Submit results within 60 days after performing the RATA. If the test is supported by the EPA's ERT, it must be submitted via CEDRI using ERT. Develop a site-specific monitoring plan for the CO CEMS that addresses design, data collection, and the quality assurance and quality control elements in 63.8(d) and the elements described in paragraphs d(1) and d(2) of 63.7505. See Appendix B, No. 2 for data recovery requirements.	40 CFR 63.7500 and Item 7.a. of Table 2 to Subpart DDDDD for basis of limit 40 CFR Part 63.7525(a) for performance evaluation 40 CFR Part 63.7550(h)(2)(i) for CEDRI 40 CFR 63.7505(d) for site-specific monitoring plan. 40 CFR 63.7545 for notification WAC 173-401-615(3)(b) for monthly reporting of deviations.

Condition	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
			Semi-annual compliance reporting in accordance with 40 CFR 63.7550.	
E.6c	CO	913 tpy as 12-month rolling total, calculated monthly	Calculate as in condition E.6a, but in tons on a monthly and 12-month rolling total basis in tons. Report monthly total and rolling 12-month total in monthly report in terms of tons. Facility-wide General Requirements, Condition 45 for calibration of CPMS. In an operation and maintenance manual, the Permitee shall identify operational parameters and practices that will constitute "proper operational practices" relative to compliance with this permit condition. The manual must be available for review by Ecology upon request. Failures to follow the manual which result in excess emissions may be considered credible evidence that the event was caused by poor or inadequate operation or maintenance. The Permitee shall report in writing to Ecology exceedances of this limit which shall include: magnitude of excess from the emission limit, the duration of the excess, the probable cause, corrective actions taken or planned, and any agency contacted. All records pertaining to emissions must be retained for a period of not less than five years	PSD-06-02

Condition	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
E.7	VOC	0.13 lbs/MMBTU	Source test once per calendar year using EPA Method 25A. An alternative method may be used if approved by Ecology. Use the average of 3 one-hour runs. The Permittee must notify Ecology at least 30 days prior to preforming the stack test. See Facility-Wide General Condition 35 for source test reporting requirements.	NOC Order No. 4153-AQ07 WAC 173-400-105(4) for Ecology given opportunity to be present at source test
E.8a	HCl	0.022 lb/MMBtu of heat input	Performance testing will be in accordance with requirements specified in 40 CFR 63.7520. Operating limits must be confirmed or reestablished during performance tests. See Appendix G, No. 3 for notification, testing, testing frequency, site-specific test plan, recordkeeping, and reporting requirements. Ongoing compliance with this condition is demonstrated by compliance with Condition E.8b.	40 CFR 63.7500 for basis of limit Item 1.a. of Table 2 to Subpart DDDDD of Part 63 for limit 40 CFR 63.7520 and Tables 4, 5, and 7 to Subpart DDDDD for performance testing requirements 40 CFR 63.7540 for confirming or reestablishing operating limits.
E.8b	HCl	Minimum operating	Maintain the 30-day rolling average operating load such that it does not exceed 110% of the highest hourly	Same as Condition E.2g

Condition	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
		conditions (operating load)	average operating load recorded during the most recent performance test which demonstrated compliance with Condition E.8a (Performance test 06/23/2020 set limit at 347 klb/hr). Develop a site-specific monitoring plan, conduct performance evaluations, maintain records of monitoring data and performance evaluations, semi-annual reporting, and monthly reporting of deviations as in Condition E.2g.	
E.8c	HCl	Minimum operating conditions (scrubber flow and pH)	Maintain the 30-day rolling average scrubber effluent pH at or above the lowest one-hour average pH and the 30-day rolling average scrubber liquid flow at or above the lowest one-hour average liquid flow rate measured during the most recent performance test which demonstrated compliance with Condition E.8a (performance test on 06/24/20 set pH limit at 3.1 minimum and flow rate limit at 1174 gpm minimum). Clean the PB7 pH probe at least once each process operating day. Develop a site-specific monitoring plan as in Condition E.2g, but for scrubber flow and pH. Conduct performance evaluations as in Condition E.2g, but for scrubber flow and pH.	Same as E.2g, except: 40 CFR 63.7520(c), Item 2 of Table 4 and Item 2a to Table 7 to 40 CFR 63 Subpart DDDDD for operating limit With the addition of: 40 CFR Part 63.7525(e)(4) for scrubber flow meter performance evaluation 40 CFR Part 63.7525(g)(4) for pH

Condition	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
			See Appendix B, No. 2 for data recovery requirements. Monthly and semi-annual reporting and recordkeeping per E.2g.	meter performance evaluation 40 CFR 63.7525(g)(3) for cleaning pH probe
E.9a	Hg	5.7E-06 lb/MMBtu of heat input	Performance testing will be in accordance with requirements specified in 40 CFR 63.7520. Operating limits must be confirmed or reestablished during performance tests. See Appendix G, No. 3 for notification, testing, site-specific test plan, recordkeeping, and reporting requirements. Ongoing compliance with this condition is demonstrated by compliance with Condition E.9b.	40 CFR 63.7500 for basis of limit Item 1.b of Table 2 to Subpart DDDDD of Part 63 for limit 40 CFR 63.7520 and Table 4, 5, and 7 to Subpart DDDDD for performance testing requirements 40 CFR 63.7540 for confirming or reestablishing operating limits
E.9b	Hg	Minimum operating condition (operating load)	Maintain the 30-day rolling average operating load such that it does not exceed 110% of the highest hourly average operating load recorded during the most recent performance test which demonstrated compliance with	40 CFR 63.7520(c), Table 4 to 40 CFR 63 Subpart DDDDD for operating limit

Condition	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
			Condition E.9a (Performance test 06/23/2020 set limit at 347 klb/hr). See Appendix B, No. 2 for data recovery requirements. Develop a site-specific monitoring plan, conduct performance evaluations, record keeping of monitoring data and performance evaluations, and semi-annual reporting as in Condition E.2g.	40 CFR 63.7550 for reporting 40 CFR 63.7505(d) for site-specific monitoring plan. 40 CFR 63.7555. 63.7560 for recordkeeping 40 CFR 63.7525(e)(4) for steam flowmeter performance evaluation
E.9c	Hg	Minimum operating condition (secondary power)	Maintain the 30-day rolling average total secondary electric power of the electrostatic precipitator at or above the average hourly total secondary power measured during the most recent performance test that demonstrated compliance with Condition E.9a. (Last performance test 06/23/2020 set minimum at 29 kW for north precipitator cell, 30 kW for south precipitator cell). Develop a site-specific monitoring plan, conduct performance evaluations, record keeping of monitoring data and performance evaluations, semi-annual reporting, and monthly reporting of deviations as in Condition E.2h. See Appendix B, No. 2 for data recovery requirements.	Same as E.2h

Condition	Parameter	**Limit** (shall not exceed)	Monitoring & Reporting	Applicable Requirements
E.9d	Hg	3.2 kg (7.1 lb) per 24-hour period	Performance Testing: EPA Method 101A in Appendix B or EPA Method 29 in Appendix A to 40 CFR Part 60 shall be used to test mercury emissions. Alternatively, the Permittee may comply with sludge sampling. Sludge sampling shall be sample according to 40 CFR 61.54(c)(1). Sludge charging rate shall be determined according to 40 CFR 61.54(c)(2), and sludge analysis shall be performed according to 40 CFR 61.54(c)(3). Mercury emissions shall be determined by the use of the equation in 40 CFR 61.54(d). No changes shall be made in the operation which would potentially increase emissions above the level determined by the most recent stack test or sludge sampling test, until the new emission level has been estimated by calculation and the results reported to the Administrator. If the results of the initial performance test or sludge sampling related to an operational change shows mercury emissions which exceed 1.6 kg (3.5 lb) per 24-hour period, additional performance tests shall be performed at least once per year in accordance with 40 CFR 61.55(a). The Administrator shall be notified at least 30 days prior to an emission test or sludge sampling test, so that they may observe the test. All samples shall be analyzed and mercury emissions/content shall be determined within	40 CFR 61.52(b) for emission standard 40 CFR 61.53(d) for performance test requirements 40 CFR 61.55(a) for additional performance testing 40 CFR 61.54 for alternative sludge sampling

Condition	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
			30 days after the stack test/sludge sampling. Each determination shall be reported to the Administrator by a registered letter dispatched within 15 calendar days following the date such determination is completed. Records of performance test results and other data needed to determine total emissions shall be retained at the source and shall be made available, for inspection by the Administrator, for a minimum of 2 years.	
E.10	Tune-Up	Once per year	Conduct a tune-up of the boiler or process heater every year. The tune-up must meet the requirements specified in 40 CFR 63.7540 (a)(10)(i) through (vi). Maintain on-site and submit, if requested by the administrator the following in a report: a. The concentrations of CO in the effluent stream in parts per million by volume, the oxygen in volume percent, measured at high fire or typical operating load, before and after tune-up of the boiler b. A description of any corrective actions taken as part of the tune-up c. The type and amount of fuel used over the 12 months prior to the tune-up. Report as required in 40 CFR 63.7550(c)(1) in semiannual compliance report compliance report.	40 CFR 63.7540 for tune-up requirements, 40 CFR 63.7515(d) for frequency 40 CFR 63.7540 (a)(10)(vi) for maintaining a report 40 CFR 63.7550(c)(1) for tune-up reporting requirements

Condition	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
E.11	Reports	N/A	Submit a semiannual compliance report with information required from Table 9 to Subpart DDDDD of 40 CFR Part 63. Semiannual compliance reports must be submitted to the EPA electronically via CEDRI no later than July 31st for reporting period January through June and no later than January 31st for reporting period July through December. Keep records of reports.	40 CFR Part 63.7550 for reporting 40 CFR 63.7555, 40 CFR 63.7560 for recordkeeping
E.12a	Startup Work Practice Standard	N/A	Start-up is defined as the firing of fuel in the boiler after a shutdown for any purpose. The Permittee must operate all CMS during start up. The Permittee must use a clean fuel during start-up as specified in Table 3 to 40 CFR Part 63 Subpart DDDDD. Once fuels are fired that are not clean fuels, vent emissions to main stacks and engage all applicable control devices. Start-up ends when any of the useful thermal energy from the boiler is supplied for heating, producing electricity, or any other purpose. The Permittee must comply with all applicable emission limits at all times except during startup periods in which you must meet this work practice, and shutdown in which you must meet the subsequent permit condition.	40 CFR 63.7575 for definition of startup (definition 1) 40 CFR 63.7500(f) for which limits apply during start-up Table 3 to 40 CFR Part 63 Subpart DDDDD for work practice 40 CFR 63.7535(b) for collecting monitoring data

Condition	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
			The Permittee must collect monitoring data during periods of startup. You must keep records and provide reports concerning activities and periods of startup.	40 CFR 63.7555 and 63.7560 for recordkeeping 40 CFR 63.7550 for reporting
E.12b	Shutdown Work Practice Standard	N/A	The Permittee must operate all CMS during shutdown. When firing fuels that are not clean fuels during shutdown as specified in Table 3 to 40 CFR Part 63 Subpart DDDDD, you must vent emissions to the main stack and operate all applicable control devices. If, in addition to the fuel used prior to the initiation of shutdown, another fuel must be used to support the shutdown process, it must be one of the clean fuels as specified in Table 3 to 40 CFR Part 63 Subpart DDDDD. The Permittee must comply with all applicable emission limits at all times except during shutdown periods in which you must meet this work practice, and startup in which you must meet the subsequent previous condition. The Permittee must collect monitoring data during periods of shutdown. You must keep records and provide reports concerning activities and periods of shutdown.	63.7500(f) for which limits apply during shutdown Table 3 to 40 CFR Part 63 Subpart DDDDD for work practice 40 CFR 63.7535(b) for collecting monitoring data 40 CFR 63.7555 and 63.7560 for recordkeeping 40 CFR 63.7550 for reporting

Condition	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
E.13	Notifications and recordkeeping – fuel usage	NA	The Permittee must keep records of monthly fuel used by the boiler, including the type of fuel and the amounts used. Maintain a copy of all calculations and supporting documentation for maximum chlorine and mercury fuel input. If you combust non-hazardous secondary materials that have been determined not to be solid waste, you must keep a record that documents how the secondary material meets this criteria. If the Permittee intends to switch fuels or makes a physical change to the boiler and the fuel switch or physical change results in the applicability of a different subcategory, you must provide notice of the date upon which you switched fuels or made the physical change within 30 days of the switch/change. The notification must include: 1) The name of the owner or operator of the affected source, the location of the source, the boiler which switched fuels or was physically changed, and the date of the notice. 2) The currently applicable subcategory under this subpart. 3) The date upon which the fuel switch or physical change occurred.	40 CFR 63.7545 (h) for notification requirement 40 CFR 63.7555(d) and 63.7560 for recordkeeping requirements. 40 CFR 63.7540(a)(2)(ii) for continuous compliance demonstration

Condition	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
E.14	Recordkeeping – Fuel Usage		The Permittee shall maintain records of the type and amount of fuel combusted each day in Power Boiler #7 and, at the end of each month, calculate annual capacity factors for each fuel on a 12-month rolling average basis.	40 CFR 60.49b(d)
E.15	Recordkeeping	N/A	The Permittee shall maintain the records pertaining to the operation of Power Boiler #7, including startups and shutdown, malfunctions of its associated air pollution control equipment, and any time the continuous monitoring systems are inoperative. CMS data, including measurement results, performance evaluations, calibration checks, adjustments and maintenance performed and operating records are to be recorded in a form suitable for inspection. Submit monthly a summary report of excess emissions and submit quarterly monitoring system performance report.	40 CFR 60.7(b), (c), (d), (f)
E.16	O_2	N/A	Operate a continuous emission monitor for O_2 that conforms to 40 CFR Pt. 60 Appendix F and Appendix B, Performance Specification 3. See No. 1 in Appendix B of this AOP for data recovery requirements.	NOC Order No. 4153-AQ07
E.17	Permitted fuels	N/A	Power Boiler No.7 is permitted to combust hog fuel, wastewater treatment plant residuals from the on-site wastewater treatment plant, paper recycling residuals	40 CFR 241.4 for non-waste determinations for specific non-hazardous materials when used as a

Condition	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
			from the on-site old corrugated cardboard pulping plant, construction and demolition wood, natural gas, and oil. Secondary materials burned in Power Boiler No.7 must be considered non-waste as specified by 40 CFR 241.4 in order for 40 CFR Part 60 Subpart CCCC to not apply. Culled fibers that will be combusted in PB No.7 must meet the definition of paper recycling residuals in 40 CFR Part 241.2	fuel, 40 CFR Part 241.2 for definition of paper recycling residual 40 CFR 60.2010 for applicability of 40 CFR Part 60 Subpart CCCC, 40 CFR 60.2265 for definitions
E.18	Construction and Demolition Wood Certification	N/A	With the annual compliance certification, the Permittee must certify that they have obtained certifications from all companies from which they have purchased construction and demolition wood for burning as fuel in Power Boiler No.7. The certifications from suppliers of construction and demolition wood must contain the following statement: the processed C&D wood has been sorted by trained operators in accordance with best management practices. The Permittee must obtain a new written certification form from all companies from which construction and demolition wood is obtained to burn in Power Boiler No.7 on an annual basis, unless more frequent certification is required by 40 CFR 241.4.	40 CFR 241.4 for written certification requirement 40 CFR 70.6(c) for annual recertification (sufficiency monitoring)

Condition	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
			The permittee must maintain a list of all suppliers of construction and demolition wood and these certifications in a format suitable for inspection by the Department of Ecology.	

1. For condition E.5b, SO_2 should be calculated as follows based on type of fuel burned in PB7

For wood: $$SO_2 \frac{lbs}{hr} = \frac{BDT\ wood}{hr} \times \frac{0.080\ lbs\ SO_2}{BDT\ wood}$$

For natural gas: $$SO_2 \frac{lbs}{hr} = \frac{1000\ ft^3 gas}{hr} \times \frac{0.003\ lb\ SO_2}{1000\ ft^3\ gas}$$

For sludge: $$SO_2 \frac{lbs}{hr} = \frac{BDT\ sludge}{hr} \times \frac{22.8\ lb\ SO_2}{BDT\ sludge}$$

For oil: $$SO_2 \frac{lbs}{hr} = \frac{gal\ oil}{hr} \times \frac{lbs\ oil}{gal\ oil} \times \frac{\%S\ in\ oil}{100\%} \times \frac{2\ lb\ SO_2}{lb\ S}$$

lb/gal for residual fuel oil is 7.9.
lb/gal for reprocessed fuel oil is 7.4.
The total SO_2 (lbs/hr) = sum from all fuel sources.
For %S in oil, use the most recent test results of percent sulfur in fuel oil tank(s).
BDT means bone dry tones.
Cubic feet of natural gas shall be measured at standard conditions.

F. CAUSTICIZER SLAKER VENT

Condition	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
F.1	PM	0.10 gr/dscf at standard conditions	Monitor at the request of Ecology	WAC 173-400-060

G. DIGESTERS, MULTIPLE-EFFECTS EVAPORATORS & CONDENSATE STRIPPER SYSTEM

The following **state-only** requirement is not federally enforceable under the Federal Clean Air Act.

Condition	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
G.1	TRS	Treat non-condensable gas (NCG) to reduce TRS emission equal to reduction achieved by thermal oxidation in a lime kiln; install a backup treatment system	Maintain records of continuous treatment as demonstrated by vent valve position, monthly NCG system inspections, and number of hours system vents each month. Report periods of untreated venting.	WAC 173-405-040(4)

H. INDUSTRIAL STACK SOURCES

Air emissions from the following units, which comprise the "industrial stack sources" at the facility as listed in the "SIP for Particulate Matter the Tacoma Tideflats" shall not exceed 1671 kg/day of PM10, as measured using the procedures in Appendix C: Recovery Furnace No. 3; Recovery Furnace No. 4; Lime Kiln No. 1; Lime Kiln No. 2; Smelt Tank No. 3; Smelt Tank No. 4E; Smelt Tank No. 4W; Power Boiler No. 6; and Power Boiler No. 7. Industrial stack sources do not include existing fugitive, area, and insignificant point source emissions. This limit may be modified through new source review or a SIP revision. Monitoring, reporting and recordkeeping requirements are described in Appendix C. [Order No. 95AQ-I006]

Note: the SIP includes the emissions from Recovery Furnace No. 3 and Smelt Vent No. 3. The Permittee is prohibited from operating Recovery Furnace No. 3 and Smelt Vent No. 3. [Order No. 99AQIS-94, Condition 2]

I. [RESERVED]

J. LOW VOLUME HIGH CONCENTRATION (LVHC) SYSTEM

(NESHAP Subpart S)

Applies to off-gases from:

Nos. 1 and 2 Kamyr steaming vessel,
Nos. 1 and 2 Kamyr flash tank/blow tank,
Kamyr flash evaporator,
No. 1 & 2 evaporator hotwell,
No. 4 evaporator hotwell,
Turpentine system, and
Pulping condensate collection tank.

The emission unit shall comply with the General Requirements of 40 CFR Part 63 as listed in Table 1 of Subpart S.

See Section N for additional requirements.

[40 CFR 63.443(a)(1)(i) and 40 CFR 63.440(d)] (Note: Only 40 CFR Part 63 requirements are cited in this permit as the applicable requirements. WAC 173-400-075(6) incorporates MACT by reference).

Condition	Parameter	Operational Requirement	Monitoring & Reporting	Applicable Requirements
J.1	HAPs	Collection and Treatment	LVHC non-condensable gas (NCG) emissions shall be enclosed and vented into a closed vent system and routed to the lime kilns, introducing the HAP emission stream with the primary fuel or into the flame zone. With written approval from Ecology, LVHC NCG emissions can alternatively be enclosed and vented into a closed vent system and routed to Power Boiler No.7 or Recovery Furnace No.4 as follows: • by introducing the HAP emission stream with the primary fuel; • by introducing the HAP emission stream into the flame zone; or • for units with a heat input capacity greater than 150 million BTU/hr, by introducing the HAP emission stream with the combustion air. The closed vent system shall meet the requirements of Section N.	40 CFR 63.443(c) 40 CFR 63.443(d) for point of introduction
J.2	HAPs	Record-keeping and reporting	Records shall be maintained for all periods of excess emissions, including those from the computer controlled bypass valves in the LVHC system. Periods of excess emissions of NGCs from the LVHC system are not violations of 40 CFR 63.443(c) and (d) provided that the time of excess emissions divided by the total process operating time in a semiannual reporting period does not exceed one (1) percent.	40 CFR 63.443(e)(1) 40 CFR 63.454(g) for malfunction recordkeeping requirements 40 CFR 63.455(g) for malfunction reporting

Condition	Parameter	Operational Requirement	Monitoring & Reporting	Applicable Requirements
			Keep records of the occurrence and duration of each malfunction of operation or the air pollution controls and monitoring equipment. Record actions taken to minimize emissions in accordance with 63.453(q) and to restore the malfunction to its usual manner of operation. Reporting of malfunctions per 40 CFR 63.455(g). The Permittee must submit a *Semi-Annual Excess Emissions and Continuous Monitoring Systems Performance Report* or *Summary Report* in accordance with 40 CFR 63.10(e)(3), delivered or postmarked by the 30th day following the end of each calendar half.	requirements for Subpart S

K. PULPING PROCESS CONDENSATES

(NESHAP Subpart S)

Applies to:

Nos. 1 and 2 Kamyr digesters, flash condenser and turpentine recovery condensate streams routed to the Kamyr evaporator hotwell and the associated condensate transfer tank;

Black liquor evaporator condensates from feed stages, surface condensers, and vacuum system of the No. 1 and No. 2 evaporators routed to the No. 1, 2 evaporator hotwell;

Black liquor evaporator condensates from feed stages, surface condenser, and vacuum system of the No. 4 evaporator system, routed to the No 4 evaporator hotwell.

HVLC collection system condensates; and

LVHC collection system condensates.

The emission unit shall comply with the General Requirements of 40 CFR Part 63 as listed in Table 1 of Subpart S.

See Section N for additional requirements.

[40 CFR 63.440(d) and 63.6(i)] (Note: Only 40 CFR Part 63 requirements are cited in this permit as the applicable requirements. WAC 173-400-075(6) incorporates MACT by reference).

Condition	Parameter	Requirement	Monitoring & Reporting	Applicable Requirements
K.1	HAPs	Collect pulping process condensates	Collect kraft pulping condensates from all named condensate streams in 40 CFR 63.446(b)(1) through (5). Report periods of non-collection or overflows monthly. Alternatively, with written approval from Ecology • Collect all Kraft pulping condensates from each HVLC collection system (40 CFR 63.446(b)(4)), from each LVHC collection system (40 CFR 63.446(b)(5)), plus other named condensate streams (40 CFR 63.446(b)(1) through (3)) that in total contain at least 65 percent of the total HAP mass from the kraft pulping condensates from the equipment systems listed in 40 CFR63.446(b)(1) through (3); or • Collect kraft pulping condensates collected from named condensate streams in 40 CFR 63.446(b)(1) through (5) which contain at least 11.1 pounds of total HAP per oven dry ton of unscreened brownstock kraft pulp feeding the bleach plant and 7.2 pounds of total HAP per oven dry ton of unscreened brownstock pulp not intended for bleaching.	40 CFR 63.446(b) for list of condensate streams 40 CFR 63.446(c) compliance options 40 CFR 63.453(i) for monitoring requirement 40 CFR 63.456 for affirmative defense 40 CFR 63.446(i) for prorated mass standard 40 CFR 63.441 for oven dried pulp definition

Condition	Parameter	Requirement	Monitoring & Reporting	Applicable Requirements
			Since the mill produces both bleached and unbleached pulp products, for the purposes of meeting the requirements above, it may meet a prorated mass standard that is calculated by prorating the applicable mass standards (kilograms of total HAP per megagram of ODP) for bleached and unbleached mills or by the ratio of annual megagrams of bleached and unbleached ODP. The following is required and/or applicable to all compliance options listed above: A CMS shall be operated to measure the appropriate parameters determined according to the procedures specified in 63.453(n) to comply with the condensate applicability requirements. Facility-wide General Requirements, Condition 45 for calibration of CPMS. Appendix B, No. 2 for data recovery requirements. The Permittee may assert an affirmative defense to a claim for civil penalties for violations of this standard that are caused by malfunction as defined in 40 CFR 63.2. The Permittee must prove by a preponderance of evidence that they have met the requirements of 63.456(a) and report according to 63.456(b).	

Condition	Parameter	Requirement	Monitoring & Reporting	Applicable Requirements
K.2	HAPs	Collection	Transfer collected kraft pulping condensates specified in K.1 through a closed collection system. The closed collection system shall meet the individual drain system requirements in 40 CFR 63.960, 63.961, and 63.962 of Subpart RR, except the closed vent systems and control devices shall be designed and operated in accordance with 40 CFR 63.443(d) and 63.450, and the conditions in Section N of this permit.	40 CFR 63.446(d)(1)
K.3	HAPs	Condensate Tank Collection and Treatment	The Permittee is permitted to install and operate condensate collection tanks (CCT) to collect kraft pulping condensates. The CCT shall be equipped so that the fixed roof and all openings are operated with no detectable leaks, as indicated by an instrument reading of less than 500 ppmv above background as measured by 40 CFR 60, Appendix A, Method 21 in accordance with the procedures in 40 CFR 63.457(d). Each opening will be maintained in a closed, sealed position at all times that the tank contains condensate, except when necessary to use the openings for sampling, removal, or for equipment inspection, maintenance, or repair. The CCT shall be equipped with a water seal device on the overflow line. The CCT shall be vented to a closed vent system meeting the requirements in 40 CFR 63.450 and	40 CFR 63.446(d)(2) and 63.457(d) for condensate tank requirements 40 CFR 63.962(b)(2)(i)(A) for drain system requirements 40 CFR 63.446(d)(2)(i) for fixed roof and opening requirements 40 CFR 63.453(l)(2) for monitoring requirements 40 CFR 63.446(e)(2) treatment requirement

Condition	Parameter	Requirement	Monitoring & Reporting	Applicable Requirements
			detailed in Section N of this permit. CCT vent gases shall be incinerated as specified in Conditions J.1 and M.1. The CCT shall be inspected for detectable leaks initially and annually using the procedures in 40 CFR 63.457(d). Kraft pulping condensates collected in the CCT shall be transferred in a closed collection system to the UNOX Reactor.	
K.4	HAPs	Treatment	All collected condensates must be discharged below the liquid surface of the UNOX Reactor. HAP treatment (with methanol as a surrogate) shall be calculated as per 40 CFR 63.457(l)(1). Treat the pulping process condensates to: • Reduce or destroy the total HAPs by at least 92 percent or more by weight; or • With written approval from Ecology, treat the pulping process condensates associated unbleached pulp to remove 3.3 kilograms or more of total HAP per megagram (6.6 pounds per ton) of ODP; or • With written approval from Ecology, treat the pulping process condensates associated with bleached pulp to remove 5.1 kilograms	40 CFR 63.446(e) for treatment requirement options, except for the option to achieve a total HAP concentration of 210 or 330 parts per million or less by weight at the outlet of the control device 40 CFR 63.446(i) for prorating

Condition	Parameter	Requirement	Monitoring & Reporting	Applicable Requirements
			or more of total HAP per megagram (10.2 pounds per ton) of ODP. Since the mill produces both bleached and unbleached pulp products, for the purposes of meeting the requirements above, it may meet a prorated mass standard that is calculated by prorating the applicable mass standards (kilograms of total HAP per megagram of ODP) for bleached and unbleached mills by the ratio of annual megagrams of bleached and unbleached ODP.	
K.5	HAPs	Inspection and Monitoring	Each pulping process condensate closed collection system shall be visually inspected once per calendar month, with at least 21 days elapsed time between inspections. Follow the inspection requirements found in 40 CFR 63.964(a) and 63.453(l)(1)(ii) including: • Verification that appropriate liquid levels in the water seals in the CCT are being maintained and identify any other defects that could reduce water seal control effectiveness (63.964(a)(1)(i)(A) and (a)(1)(v)), • Verification that each junction box has closure devices in place with no defects (63.964(a)(1)(ii)), and	40 CFR 63.453(l) for monitoring requirements for each pulping process condensate closed collection system 40 CFR 63.453(l)(3) for corrective actions requirement Approval letter dated 10/22/2014 for inspection flexibility

Condition	Parameter	Requirement	Monitoring & Reporting	Applicable Requirements
			• Verification that the unburied portion of the collection system piping has no defects (63.964(a)(1)(iii)), and • Inspect closed-vent systems and control devices in accordance with Section N. In the event that a visible defect is identified or if an instrument reading of 500 parts per million or greater above background is measured, the Permittee shall take corrective actions as specified in Condition K.6	
K.6	HAPs	Corrective Actions	Follow the repair requirements found in 40 CFR 63.964(b)(1) and (2) including: • The first effort to repair a defect shall be no later than 5 calendar days after detection, • Repair shall be completed as soon as possible, but no later than 15 calendar days after detection unless the repair of the defect requires emptying or temporary removal from service of the collection system • If repair of the defect requires emptying or temporary removal of the condensate collection system from service, the defect will be repaired the next time the process equipment generating the condensate stops operation. The repair of the defect will be	40 CFR 63.453(l)(3) for reference to 40 CFR 63.964(b) for corrective action measures

Condition	Parameter	Requirement	Monitoring & Reporting	Applicable Requirements
			completed before the process resumes operation.	
K.7	HAPs	Monitoring	The control device (UNOX Reactor) shall be operated in a manner consistent with the procedures/values established under 40 CFR 63.453(n). Conduct daily monitoring of the total effective aerator amperage in the UNOX Reactor, as specified below, which is the site-specific requirements established in the November 15 submittal of the 2010 IPT: • Aerator amperage shall be measured at least once every 15 minutes. • On a daily basis, calculate a 15 day rolling average of total effective aerator amperage. Compliance shall be demonstrated by: • 15 day rolling total effective aerator amperage average greater than 23.5 amps per reactor pass when operating two cells in parallel, or • 15 day rolling total effective aerator amperage average greater than 44.5 amps when operating one cell. To change the average amperage values the procedures in 40 CFR 63.453(n) must be followed.	40 CFR 63.453(j)(2) for treatment system monitoring requirements 40 CFR 63.446(e)(2) and 40 CFR 63.453(n) 40 CFR 63.453(o) for proper operation of the UNOX Reactor

Condition	Parameter	Requirement	Monitoring & Reporting	Applicable Requirements
			Facility-wide General Requirements, Condition 45 for calibration of CPMS. Appendix B, No. 2 for data recovery requirements	
K.8	HAPs	Condensate Treatment	Conduct a performance test within 45 days after the beginning of each quarter and meet the applicable emission limit in 40 CFR 63.446(e)(2). The performance test conducted in the first quarter (annually) shall be performed for total HAP as specified in 40 CFR 63.457(g) and meet the percent reduction or mass removal emission limit specified in 40 CFR 63.446(e)(2). The remaining quarterly performance tests shall be performed as specified in 40 CFR 63.453(j)(3)(i), except the Permittee may use the applicable methanol procedure in 40 CFR 63.457(l)(1) or (2) and the value of r determined during the first quarter test instead of measuring the additional HAP to determine a new value of r. Report results of the performance before the close of business on the 60th day following the completion of the performance test, unless approved otherwise in writing by Ecology.	40 CFR 63.453(j)(3) for performance testing requirements 40 CFR 63.457(l) for percent reduction and mass removal calculations 40 CFR 63.455(h) for reporting

Condition	Parameter	Requirement	Monitoring & Reporting	Applicable Requirements
K.9	HAPs	Record-keeping and reporting	Keep records of the occurrence and duration of each malfunction of operation or the air pollution controls and monitoring equipment. Record actions taken to minimize emissions in accordance with 63.453(q) and to restore the malfunction to its usual manner of operation. Reporting of malfunctions per 40 CFR 63.455(g). The Permittee must submit a *Semi-Annual Excess Emissions and Continuous Monitoring Systems Performance Report* or *Summary Report* in accordance with 40 CFR 63.10(e)(3), delivered or postmarked by the 30th day following the end of each calendar half.	40 CFR 63.454(g) for malfunction recordkeeping requirements 40 CFR 63.455(g) for malfunction reporting requirements for Subpart S

L. BLEACHING SYSTEM

(NESHAP Subpart S)

Applies to:

First chlorine dioxide tower vent,
First chlorine dioxide stage washer vent,
First chlorine dioxide stage filtrate tank vent,
Extraction stage washer vent (subject only as in CFR 63.445(a) and (d), 63.445(b) and (c) do not apply)
Extraction stage filtrate tank (subject only as in 40 CFR 63.445(a) and (d), 63.445(b) and (c) do not apply)
Second chlorine dioxide tower vent,
Second chlorine dioxide stage washer vent, and
Second chlorine dioxide stage filtrate tank vent.

(Note: Only 40 CFR Part 63 requirements are cited in this permit as the applicable requirements. WAC 173-400-075(6) incorporates MACT by reference).

The emission unit shall comply with the General Requirements of 40 CFR Part 63 as listed in Table 1 of Subpart S.

See Section N for additional requirements.

Condition	Parameter	Operating Requirement	Monitoring & Reporting	Applicable Requirements
L.1	HAPs	Collection	Vent gases from bleaching system stages where chlorinated compounds are introduced shall be enclosed and vented into a closed vent system and routed to the Bleach Plant Scrubber. The closed vent system must meet the requirements of 40 CFR 63.450 and the conditions in Section N of this permit. Record all periods during which bleach plant vent gases were not collected and treated each month. Report periods of such nontreatment monthly.	40 CFR 63.445(b)

Condition	Parameter	Operating Requirement	Monitoring & Reporting	Applicable Requirements
L.2	HAPs	Treatment	Method 26A with modifications specified in 63.457(b)(5)(ii)(A) through (K) is the reference test method. The Bleach Plant Scrubber shall reduce the total chlorinated HAP mass in the vent stream entering the scrubber by 99 percent or more by weight; achieve a scrubber outlet concentration of 10 parts per million or less by volume of total chlorinated HAP; or achieve a scrubber outlet mass emission rate of 0.002 pounds of total chlorinated HAP mass per ton of ODP. See Appendix G, No.4 for testing frequency, test plan, operating conditions, and reporting requirements. Ongoing compliance with this condition is indicated by complying with Condition L.4.	40 CFR 63.445(c) for limit 63.457 for performance test requirements, methods, and procedures
L.3	HAPs	Treatment	The Permittee shall comply with the chloroform limitations under 40 CFR 430.24(a)(1) and (e). Report any exceedances associated with the standards of 40 CFR 430.24(a)(1)and (e) in the monthly air report.	40 CFR 63.445(d)
L.4	HAPs	Inspection and Monitoring	Monitor scrubber liquid inlet flow rate to the active section of the scrubber and scrubber effluent oxidation/reduction potential (ORP) with continuous monitoring systems (CMS). Fan operation shall also be measured and recorded as an indicator of gas scrubber vent gas inlet flow rate. The CMS shall be operated and maintained according to the	40 CFR 63.453(a) and (c) 40 CFR 63.453(o) for definition of a violation and excess emissions

Condition	Parameter	Operating Requirement	Monitoring & Reporting	Applicable Requirements
			manufacturer's specifications and shall include a continuous recorder. Facility-wide General Requirements, Condition 45 for calibration of CPMS. See Appendix B, No. 2 for data recovery requirements. Compliance shall be demonstrated by operating parameters as 3 hour block averages determined or confirmed during most recent 5-year performance test Performance test completed 5/19/2020 set limits as follows: • Fan operation: on • Liquid inlet flow to the active section of the scrubber: White liquor greater than or equal to 70 gpm – 3 hour block average • ORP: White liquor less than or equal to -361 mv – 3 hour block average) To change the operational values the procedures in 40 CFR 63.453(n) must be followed. Operation of the scrubber outside the range established for operating parameter values shall constitute a violation of the applicable emission standard, and shall be reported as excess emissions in the monthly report. To establish affirmative defense to a claim for civil penalties for a violation caused by a malfunction, the	40 CFR 63.456 for affirmative defense 40 CFR 63.453(m) for alternative monitoring approval.

Condition	Parameter	Operating Requirement	Monitoring & Reporting	Applicable Requirements
			Permittee must meet the requirements of 63.456(a) and (b). If alternative monitoring is desired, the Permittee shall petition the Department and USEPA to use alternate parameters to monitor the bleach plant scrubber.	
L.5	HAPs	Malfunction recordkeeping and reporting	Keep records of the occurrence and duration of each malfunction of operation or the air pollution controls and monitoring equipment. Record actions taken to minimize emissions in accordance with 63.453(q) and to restore the malfunction to its usual manner of operation. Reporting of malfunctions per 40 CFR 63.455(g). The Permittee must submit a *Semi-Annual Excess Emissions and Continuous Monitoring Systems Performance Report* or *Summary Report* in accordance with 40 CFR 63.10(e)(3) and as applicable in Table 1 to Subpart S, delivered or postmarked by the 30th day following the end of each calendar half.	40 CFR 63.454(g) for malfunction recordkeeping requirements 40 CFR 63.455(g) for malfunction reporting requirements for Subpart S

M. HIGH VOLUME LOW CONCENTRATION (HVLC) SYSTEM

(NESHAP Subpart S)

Applies to the following systems:

Pulp washing,

Knotter system,

Screen system

(Note: Only 40 CFR Part 63 requirements are cited in this permit as the applicable requirements. WAC 173-400-075(6) incorporates MACT by reference).

The emission unit shall comply with the General Requirements of 40 CFR Part 63 as listed in Table 1 of Subpart S.

See Section N for additional requirements.

Condition	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
M.1	HAPs	Collection and Treatment	The HVLC NCG collection system shall be enclosed and vented to Recovery Furnace No. 4 except for each knotter system that does not exceed 0.1 pounds of HAPs per ton of ODP, and each screen system that does not exceed 0.2 pounds HAPs per ton of ODP. The closed-vent system shall meet the requirements of 40 CFR 63.450 and the requirements of Section N of this permit. The HAP stream shall be introduced into Recovery Furnace No.4 , through one of the following methods: • By introducing the HAP emission stream with the combustion air if the unit has a heat input capacity greater than 150 million BTU/hr; • By introducing the HAP stream with the primary fuel, or • By introducing the HAP stream into the flame zone. With written approval from Ecology, HVLC NCGs can alternatively be enclosed and vented into a closed vent system and routed to the lime kilns by introducing the HAP	40 CFR 63.443(a)(1)(ii)(A) and 63.443(a)(1)(ii)(B) for exceptions 63.443(c) for collection and treatment requirement 63.443(d) for requirements for treatment

Condition	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
			emission stream with the primary fuel or into the flame zone. With written approval from Ecology, HVLC NCGs can alternatively be enclosed and vented into a closed vent system and routed to Power Boiler No.7 using the same methods as listed for the recovery furnace above.	
M.2	HAPs	Record-keeping and reporting	Records shall be maintained for all periods of excess emissions. Periods of excess emissions from the HVLC system are not violations of 40 Part 63.443(c) and (d) provided that the time of excess emissions divided by the total process operating time in a semiannual reporting period does not exceed four (4) percent. Facility-wide General Requirements, Condition 45 for calibration of CPMS. Keep records of the occurrence and duration of each malfunction of operation or the air pollution controls and monitoring equipment. Record actions taken to minimize emissions in accordance with 63.453(q) and to restore the malfunction to its usual manner of operation. Reporting of malfunctions per 40 CFR 63.455(g). The Permittee must submit a *Semi-Annual Excess Emissions and Continuous Monitoring Systems Performance Report* or *Summary Report* in accordance with 40 CFR 63.10(e)(3) and as applicable in Table 1 to Subpart S, delivered or	40 CFR 63.454 for recordkeeping requirements 40 CFR 63.455 for reporting requirements 40 CFR 63.443(e)(2) for excess emission violation determination 40 CFR 63.454(g) for malfunction recordkeeping requirements 40 CFR 63.455(g) for malfunction reporting requirements for Subpart S

Condition	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
			postmarked by the 30th day following the end of each calendar half.	

N. 40 CFR PART 63 SUBPART S STANDARDS FOR ENCLOSURES AND CLOSED-VENT SYSTEMS

Applicable to closed-vent systems used to convey HVLCs and LVHCs (40 CFR 63.450(a) for applicability), closed vent systems on kraft pulping process condensates (40 CFR 63.446(d)(1) for applicability), and closed vent systems on bleaching systems (40 CFR 63.450(a) for applicability).

The emission unit shall comply with the General Requirements of 40 CFR Part 63 as listed in Table 1 of Subpart S.

Condition	Parameter	Operational Requirement	Monitoring & Reporting	Applicable Requirements
N.1	HAPs	Each enclosure shall maintain negative pressure at each enclosure or hood opening	For each enclosure or hood opening, a visual inspection of the closure mechanism shall be performed at least once every calendar month to ensure the opening is maintained in the closed position and sealed. There will be at least 21 days between inspections.	40 CFR 63.450(b) for enclosure requirement 63.453(k)(1) for inspection requirement 10/22/2014 letter for alternate monitoring request approval
N.2	HAPs	No visible defects in closed vent system components	Each closed vent system (ductwork, piping, enclosures, and connections to covers in the collection systems) shall be visually inspected for visible evidence of defects every calendar month. There will be at least 21 days between inspections.	40 CFR 63.453(k)(2) for inspection requirement 10/22/2014 letter for alternate monitoring request approval

Condition	Parameter	Operational Requirement	Monitoring & Reporting	Applicable Requirements
N.3	HAPs	Components of the closed vent systems that are operated at positive pressure and located prior to a control device shall be designed for and operated with no detectable leaks	Measure initially and annually all of the components of closed-vent systems under positive pressure and located prior to a control device for detectable leaks, as indicated by an instrument reading of less than 500 ppmv above background, as measured by 40 CFR Part 60, Appendix A, Method 21.	40 CFR 63.453(k)(3) for demonstration requirement and frequency 40 CFR 63.450(c) for leak definition 40 CFR 63.457(d) for detectable leak procedures
N.4	HAPs	Each enclosure shall maintain negative pressure at each enclosure or hood opening	Demonstrate initially and annually that each enclosure or hood opening is maintained at negative pressure as specified in 40 CFR 63.457(e). Each enclosure or hood opening closed during the initial performance test shall be maintained in the closed position at all times except when necessary to open for sampling, inspection, maintenance, or repairs.	40 CFR 63.450(b) for negative pressure requirement 40 CFR 63.453(k)(4) for demonstration requirement
N.5	HAPs	Collection and Treatment	Each bypass line in the closed-vent system that could divert vent streams containing HAPs to the atmosphere without meeting the emission limitations in 40 CFR 63.443,	40 CFR 63.450(d) for bypass requirements

Condition	Parameter	Operational Requirement	Monitoring & Reporting	Applicable Requirements
			63.445 and the requirements of 63.446(d)(1), shall comply with either of the following requirements: (1) On each bypass line, the Permittee shall install, calibrate, maintain, and operate according to the manufacturer's specifications a flow indicator that is capable of taking periodic readings as frequently as specified in 40 CFR 63.454(e). The flow indicator shall be installed in the bypass line in such a way as to indicate flow in the bypass line (note: monitoring bypass valve position is a satisfactory flow indicator); or (2) For bypass line valves that are not computer controlled, the Permittee shall maintain the bypass line valve in the closed position with a car seal or a seal placed on the valve or closure mechanism in such a way that valve or closure mechanism cannot be opened without breaking the seal. Keep records of the occurrence and duration of each malfunction of operation or the air pollution controls and monitoring equipment. Record actions taken to minimize emissions in accordance with 63.453(q) and to restore the malfunction to its usual manner of operation. Reporting of malfunctions per 40 CFR 63.455(g). The Permittee must submit a *Semi-Annual Excess Emissions and Continuous Monitoring Systems Performance Report* or *Summary Report* in accordance with 40 CFR 63.10(e)(3)	63.446(d)(1) for applicability to condensate collection systems 40 CFR 63.454(g) for malfunction recordkeeping requirements 40 CFR 63.455(g) for malfunction reporting requirements for Subpart S

Condition	Parameter	Operational Requirement	Monitoring & Reporting	Applicable Requirements
			and as applicable in Table 1 to Subpart S, delivered or postmarked by the 30th day following the end of each calendar half. Facility-wide General Requirements, Condition 45 for calibration of CPMS. See Appendix B, No. 2 for data recovery requirements.	

Condition	Parameter	Operational Requirement	Monitoring & Reporting	Applicable Requirements
N.6	HAPs	Timely repairs of defects of the closed vent systems or enclosure discovered during monthly inspections or annual testing	If an inspection or testing required by Conditions N.1 through N.5 identifies visible defects, or if an instrument reading of 500 ppmv above background is measured, or if enclosure openings are not maintained at negative pressure, then the following corrective actions shall be taken: • Make a first effort to repair or correct the closed vent system as soon as practicable, but no later than five calendar days after the problem has been identified. • Complete the repair or corrective action no later than 15 days after the problem is identified. • Delay of repair or corrective action is allowed if the repair or corrective action is technically infeasible without a process unit shutdown, or if it is determined that the emissions resulting from the immediate repair would be greater than the emission likely to result from delay of repair. Repair of such equipment shall be completed by the end of the next process shutdown.	40 CFR 63.453(k)(6) for corrective action requirements 40 CFR 63.450(b) and (c) for operating requirements

N.7	HAPs	Record-keeping	For each applicable enclosure opening, closed vent system, and closed collection system, prepare and maintain a site specific inspection plan, including a drawing or schematic of the components of applicable affected equipment and shall record the following information for each inspection: • date of inspection, • equipment type and identification, • results of negative pressure tests for enclosures, and • results of leak detection tests • position and duration of opening of bypass line valves and the condition of any valve seals, and • duration of the use of manual or computer controlled bypass valves If any defects or leaks are detected, record the following additional information: • nature of the defect or leak and the method of detection, • date the defect or leak was detected and the date of each attempt to repair the defect or leak, • repair methods applied in each attempt to repair the defect or leak, • reason for the delay if the defect or leak is not repaired within 15 days, • expected date of successful repair of the defect or leak if the repair is not completed within 15 days, • date of successful repair of the defect or leak,	40 CFR 63.454(b)

O. PAPER MACHINE 13

Condition	Parameter	Limit (shall not exceed)	Monitoring & Reporting	Applicable Requirements
O.1	VOC	Must use low-VOC additives	Additives used in the paper making process on Paper Machine 13 shall be "low VOC". Permittee shall annually submit a list of additives used in the paper making process on Paper Machine 13 and identify those that are not "low VOC". Submit the certification in by mail to Ecology by March 1st each year. Maintain and follow an operation and maintenance manual.	NOC No. 10948

P. RECIPROCATING INTERNAL COMBUSTION ENGINES (RICE) MACT

The engines identified below are subject to the RICE NESHAP, 40 CFR Part 63 Subpart ZZZZ, requirements in Permit Conditions P1 through P10.

Model	Description	Fuel	Category	HP	Date Installed
Kohler 100RZG	Standby for cogeneration, emergency lights in chip silo and shops (generator set)	Propane	Existing Emergency SI less than 500 hp	13.4	1973
Caterpillar 3208	Fire pump 1648	Diesel	Existing Emergency CI less than 500 hp	235	1987
Caterpillar 3412	Emergency Power to wastewater treatment plant dewatering	Diesel	Existing Emergency CI greater than 500 hp	749	1991
Onan Model 100DGB	Emergency power to recovery dump valves	Diesel	Existing Emergency CI less than 500 hp	134	1993
Onan 15JC-L	Emergency Power to front gate (generator set)	Propane	Existing Emergency SI less than 500 hp	20.1	1993

Model	Description	Fuel	Category	HP	Date Installed
Caterpillar SR4	Emergency power to secondary WWTP pump	Diesel	Existing Emergency CI greater than 500 hp	2012	1995
Kohler 10RY-E	Generator for Emergency Telephone (Engine Serial No. 0762693)	Propane	Existing Emergency SI less than 500 hp	13.4	2003
Wisconsin TJD367455	Emergency Power to LK2 Drive	Gasoline	Existing Emergency SI less than 500 hp	less than 20	2004
Kohler 10RZ82	Emergency power to substation lighting (generator set)	Propane	Existing Emergency SI less than 500 hp	17.5	Before 2006
Kohler 20RZ02	Auxiliary generator for paper mill lighting (generator set)	Propane	Existing Emergency SI less than 500 hp	50	Before 2006

Condition	Monitoring & Reporting	Applicable Requirements
P.1	At all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.	40 CFR 63.6605(b)
P.2	During periods of startup, minimize idle time (not to exceed 30 minutes), after which time the non-startup emission limitations apply.	40 CFR 63.6625(h)

Condition	Monitoring & Reporting	Applicable Requirements
P.3	There is no time limit on the use of emergency stationary RICE in emergency situations. Emergency RICEs may operate for up to100 hours per year for maintenance checks and readiness testing or other periods defined in 40 CFR 63.6640(f). Emergency RICEs may operate for up to 50 hours per year in non-emergency situations not mentioned above. This time will count toward the 100 hours per year previously mentioned.	40 CFR 63.6640(f)
P.4	Install a non-resettable hour meter on the engine. Records of the hours of operation of the engine that is recorded through the non-resettable hour meter must be maintained. Records must include how many hours are spent for emergency operation, including what classified the operation as an emergency, and how many hours are spent for nonemergency operation. If the engines are used for demand response operation, maintain records of the notification of the emergency situation and the time the engine was operated as part of demand response. Record keeping per Condition P.8.	40 CFR 63.6625(f) for meter requirement 40 CFR 63.6655 for recordkeeping 40 CFR 63.6660 for records retention
P.5	If you own or operate any of the stationary RICE engines specified in 40 CFR 63.6625(e)(1) through (9), you must operate and maintain the stationary RICE and after treatment control device (if any) according to the manufacturer's emission related written instructions or develop your own maintenance plan. Records must be retained of the operation and maintenance of the engines according to the manufacturer's emission-related instructions or according to the developed maintenance plan consistent with good air pollution control practice for minimizing emissions. Recordkeeping per Condition P.8.	63.6625(e) for operation and maintenance requirements 40 CFR Part 63 Subpart ZZZZ, Table 6 40 CFR 63.6655 for recordkeeping

Condition	Monitoring & Reporting	Applicable Requirements
		40 CFR 63.6660 for records retention
P.6	For emergency stationary CI RICE: 1) Change oil and filter every 500 hours of operation or annually, whichever comes first. 2) Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary. 3) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. Recordkeeping per Condition P.8.	Table 2c and 2d to 40 CFR Part 63 Subpart ZZZZ
P.7	For emergency stationary SI RICE : 1) Change oil and filter every 500 hours of operation or annually, whichever comes first. 2) Inspect spark plugs every 1,000 hours or annually, whichever comes first, and replace as necessary. 3) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. Recordkeeping per Condition P.8.	Table 2c and 2d to 40 CFR Part 63 Subpart ZZZZ
P.8	Your records must be in a form suitable and readily available for expeditious review. Keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record.	40 CFR 63.6655 (except 63.6655(c))

Condition	Monitoring & Reporting	Applicable Requirements
P.9	If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the work practice requirements on the schedule required in Table 2c to 40 CFR Part 63 Subpart ZZZZ, or if performing the work practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the work practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The work practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. Sources must report any failure to perform the work practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable.	Footnote 1 to Table 2c to 40 CFR Part 63 Subpart ZZZZ
P.10	All emergency stationary RICE must be operated in accordance with the requirements of 40 CFR 63.6640(f)(1) through (4). If the engine is not operated as required the engine will not be considered an emergency engine and must meet all requirements for non-emergency engines.	40 CFR 63.6640(f) for emergency engine classification requirements

The engine identified below is subject to the Spark Ignition (SI) Internal Combustion Engines (ICE) NSPS, 40 CFR Part 60 Subpart JJJJ, requirements in Permit Condition P.11 through P.16. General provisions from Part 60 applicable to this engine can be found in Table 3 to Subpart JJJJ.

Model	Description	Fuel	Category	HP	Date Installed
Kohler 15REYG	Provides emergency lighting at Power Boiler No. 7, located in Power Boiler No. 6 Boiler Room (generator set)	Propane	New Emergency SI	25	2012

Condition	Monitoring & Reporting	Applicable Requirements
P.11	If you are an owner or operator of an emergency stationary SI internal combustion engine that is less than 130 HP, was built on or after July 1, 2008, and does not meet the standards applicable to non-emergency engines, you must install a non-resettable hour meter upon startup of your emergency engine. There is no time limit on the use of emergency stationary RICE in emergency situations. Emergency RICEs may operate for up to 100 hours per year for maintenance checks and readiness testing or other periods defined in 40 CFR 63.6640(f). Emergency RICEs may operate for up to 50 hours per year in non-emergency situations not mentioned above. This time will count toward the 100 hours per year previously mentioned. If you do not operate the engine according to the requirements in paragraph 60.4243(d)(1) through (3), the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.	40 CFR 60.4237(c) for meter requirement 40 CFR 60.4243(d) for 100 hour limitation and 50-hour non-emergency limitation
P.12	Owners and operators of stationary SI ICE with a maximum engine power less than or equal to 25 HP manufactured on or after July 1, 2008 and with displacement at or above 225 cc must comply with the emission standards in 40 CFR Part 90.	40 CFR 60.4230(a)(6) for applicability of 40 CFR Part 60.4236. 40 CFR 60.4236(a) for applicability of 40 CFR 60.4233 40 CFR 60.4233(a) for applicability of emissions standards in 40 CFR 60.4231(a) 40 CFR Part 4231(a) for applicability of 40 CFR Part 90

Condition	Monitoring & Reporting	Applicable Requirements
P.13	If you are an owner or operator of a stationary SI internal combustion engine that is manufactured after July 1, 2008, and must comply with the emission standards specified in §60.4233(a) through (c), you must comply by purchasing an engine certified to the emission standards in §60.4231(a) through (c), as applicable, for the same engine class and maximum engine power. In addition, you must meet one of the following requirements: If you operate and maintain the certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions, you must keep records of conducted maintenance to demonstrate compliance, but no performance testing is required if you are an owner or operator. You must also meet the requirements as specified in 40 CFR part 1068, subparts A through D, as they apply to you. If you adjust engine settings according to and consistent with the manufacturer's instructions, your stationary SI internal combustion engine will not be considered out of compliance. OR If you do not operate and maintain the certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions, your engine will be considered a non-certified engine, and you must demonstrate compliance according to (a)(2)(i) through (iii) of this section, as appropriate.	40 CFR 60.4243(a) for certification and operating and maintenance requirements

Condition	Monitoring & Reporting	Applicable Requirements
P.14	Records must be kept of: 1) All notifications submitted to comply with this subpart and all documentation supporting any notification. 2) Maintenance conducted on the engine. 3) If the stationary SI internal combustion engine is a certified engine, documentation from the manufacturer that the engine is able to meet the emission standards and information as required in 40 CFR parts 90, 1048, 1054, and 1060, as applicable. 4) If the stationary SI internal combustion engine is not a certified engine or is a certified engine operating in a non-certified manner and subject to §60.4243(a)(2), documentation that the engine meets the emission standards.	40 CFR 60.4245(a) for recordkeeping requirements
P.15	Owners and operators of stationary SI ICE must operate and maintain stationary SI ICE that achieve the emission standards as required in §60.4233 over the entire life of the engine.	40 CFR 60.4234 for operating and maintenance requirement
P.16	If using an air-to-fuel (AFR) ratio controller, it is expected that air-to-fuel ratio controllers will be used with the operation of three-way catalysts/non-selective catalytic reduction. The AFR controller must be maintained and operated appropriately in order to ensure proper operation of the engine and control device to minimize emissions at all times.	40 CFR 60.4243(g) for air-to-fuel ratio controller requirements

The engine identified below is subject to the Compression Ignition (SI) Internal Combustion Engines (ICE) NSPS, 40 CFR Part 60 Subpart IIII, requirements in Permit Condition P.17 through P.21. General provisions from Part 60 applicable to this engine can be found in Table 8 to Subpart IIII.

Model	Description	Fuel	Category	HP	Date Installed
Deutz D2011L03i	Emergency Power to LK1 Drive	Diesel	New Emergency CI	49	2020

Condition	Monitoring & Reporting	Applicable Requirements
P.17	The Permittee must comply by purchasing an engine certified to the emission standards in 40 CFR 60.4205(b) for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's emission-related specifications. The certification emission standards for new nonroad CI engines applicable to this engine are in 40 CFR 1039.104, 40 CFR 1039.105, 40 CFR 1039.107, 40 CFR 1039.115, and Table 2 to Subpart IIII.	40 CFR 60.4202(a)(1)(ii) for certification emission standards 40 CFR 60.4205(b) for 60.4202 applicability 40 CFR 60.4211(c) for purchasing certified engine
P.18	The Permittee must use diesel fuel that has a maximum sulfur content of 15 ppm and a minimum cetane index of 40 or a maximum aromatic content of 35 percent by volume.	40 CFR 80.510(b) for fuel requirements 40 CFR 60.4207(b) for applicability of 40 CFR 80.510(b)

Condition	Monitoring & Reporting	Applicable Requirements
P.19	The Permittee must: (1) Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions. (2) Change only those emission-related settings that are permitted by the manufacturer. (3) Meet the requirements of 40 CFR Parts 89, 94 and/or 1068, as they applicable.	40 CFR 60.4211(a) for compliance requirements
P.20	Owners and operators of stationary CI ICE must operate and maintain stationary CI ICE that achieve the emission standards as required in 40 CFR 60.4204 and 60.4205 over the entire life of the engine.	40 CFR 60.4206 for maintaining emissions standards over the life of the engine
P.21	In order for the engine to be considered an emergency stationary ICE, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in items 40 CFR 60.4211(f)(1) through (3), is prohibited. If you do not operate the engine according to the requirements in paragraphs 40 CFR 60.4211(f)(1) through (3), the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.	40 CFR 60.4211(f) for operating the engine as an emergency engine

Condition	Monitoring & Reporting	Applicable Requirements
P.22	If you do not install, configure, operate, and maintain your engine and control device according to the manufacturer's emission-related written instructions, or you change emission-related settings in a way that is not permitted by the manufacturer, you must demonstrate compliance as follows: You must keep a maintenance plan and records of conducted maintenance to demonstrate compliance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, if you do not install and configure the engine and control device according to the manufacturer's emission-related written instructions, or you change the emission-related settings in a way that is not permitted by the manufacturer, you must conduct an initial performance test following the requirements as required by Subpart IIII to demonstrate compliance with the applicable emission standards within 1 year of such action.	40 CFR 60.4211(g) for compliance requirement if engine installation, configuration, operation, and maintenance differs from manufacturer's recommendations

The engines identified below are subject to 40 CFR Part 60 Subpart JJJJ, but only as provided under 40 CFR 60.4230(a)(6).

Model	Description	Fuel	Category	HP	Date Installed
Kohler 15RES LP	Generator for backup power at Recovery Furnace 4 for ESP/Dump valve/Rapid Drain	Propane	New Emergency SI	25	4/10/2008
Kohler 1000RZG	Standby generator for cogeneration, power for Oil pumps/Turbine/Turning gear/DC lube oil/Jacking oil/Generator protection relay	Propane	New Emergency SI	162	6/19/2008

Q. DIGESTER CHIP CONVEYORS

Condition	Parameter	Operating Requirement	Monitoring & Reporting	Applicable Requirements
Q.1a	Particulate	Cyclone Operation	The high efficiency system is designed for dust collection while chips are being transferred to the digesters and must be monitored by the mill's distributed control system. If the cyclone becomes inoperable, corrective action must be initiated within 24 hours and completed as soon as practicable. Ecology must be notified if the cyclone will be inoperable for more than 72 hours and chips will continue to be transferred to the digesters.	Order No. 15833 Condition 1
Q.1b	Particulate	Cyclone Operation	The high efficiency cyclone must be operated and maintained in a manner consistent with safety and good air pollution control practices for minimizing emissions at all times.	Order No. 15833 Condition 2

FACILITY WIDE GENERAL REQUIREMENTS

These generally applicable requirements apply facility-wide, including insignificant emission units or activities. Insignificant emission units or activities, however, are not subject to monitoring, testing, recordkeeping, reporting, or compliance certification requirements.

1. Varying Emission Rate. The Permittee cannot vary the rate of emission of a pollutant according to atmospheric conditions or ambient concentrations of that pollutant, except as directed according to air pollution episode regulations. [WAC 173-400-205]

2. Detrimental Emissions. The Permittee shall not cause or permit emission of any contaminant if it is detrimental to the health, safety, or welfare of any person, or causes damage to property or business. [WAC 173-400-040(6)]

3. Concealment and Masking. The Permittee shall not install or use any means that conceal or mask an emission of an air contaminant that would otherwise violate provisions in this permit. [WAC 173-400-040(8)]

4. Fugitive Emissions. The Permittee shall take reasonable precautions to prevent the release of air contaminants from emission units engaged in material handling, construction, demolition, or any other operation that is a source of fugitive emissions. Reasonable precautions include but are not limited to application of water as necessary to control fugitive dust or the timely removal or coverage of material piles. [WAC 173-400-040(4)(a)]

5. Fugitive Dust. The Permittee shall take reasonable precautions to prevent fugitive dust from becoming airborne and maintain and operate the source to minimize emissions. Reasonable precautions include but are not limited to application of water as necessary to control fugitive dust or the timely removal or coverage of material piles. [WAC 173-400-040(9)(a)]

6. Particulate Matter Deposition. The following condition is state-only and is not federally enforceable under the Clean Air Act: No deposit of particulate matter beyond property line so as to interfere unreasonably with use and enjoyment. [WAC 173-400-040(3)]

7. Odors. The following condition is state-only and is not federally enforceable under the Clean Air Act: Any person causing odor which may unreasonably interfere with use & enjoyment of property must use recognized good practice and procedures to reduce odors to a reasonable minimum. [WAC 173-400-040(5)]

8. Opacity. The Permittee may not cause or allow the emission of a plume from any emission unit other than a kraft recovery furnace, smelt dissolver tank, or lime kiln, which has an average opacity greater than 20% for more than 6 consecutive minutes in any 60 minute period. The emissions unit shall comply with the alternative visible emission standard for:

    a. Soot blowing or grate cleaning in WAC 173-400-040(2)(a);

b. Hog fuel or wood fired boiler in operation before January 24, 2018, in WAC 173-400-040(2)(e); and/or

c. Furnace refractory in WAC 173-400-040(2)(f).

These provisions shall not apply when the presence of uncombined water is the only reason for the opacity in the plume to exceed the applicable maximum. [WAC 173-405-040(6)]

9. Complaints. Except where specific requirements are defined elsewhere, the Permittee shall assure compliance with Conditions 1 through 8 by recordkeeping of actions taken by the Permittee in response to complaints received by the Permittee or of possible noncompliance noticed by the facility staff in day to day operations. The Permittee shall assess the validity of each complaint and commence corrective action, if warranted, as soon as possible but no later than 3 working days of receiving the complaint. The Permittee shall keep records of the following: complaints received; the assessment of validity; and what, if any, corrective action is taken in response to the complaint. [WAC 173-401-630]

10. Sulfur Dioxide Emissions. The emission of sulfur dioxide from any emissions unit other than a recovery furnace or lime kiln shall not exceed 1,000 parts per million for an hourly average, corrected to 7% oxygen for combustion units. [WAC 173-405-040(9)]

11. Credible Evidence. For purposes of submitting compliance certifications or establishing whether or not a person has violated or is in violation of this permit, nothing shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed. [40 CFR 51.212; 40 CFR 52.12; 40 CFR 52.33; 40 CFR 60.11; 40 CFR 61.12]

12. Good Air Pollution Control Practice. The Permittee shall at all times, including periods of abnormal operation and upset conditions, to the extent practicable, maintain and operate any affected facility, including associated air pollution control equipment, in a manner consistent with good air pollution control practice. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to Ecology which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. [WAC 173-405-040(10); 40 CFR §60.11(d) for Power Boiler No. 7 & Recovery Furnace No. 4, 40 CFR 63.6(e)(1)]

13. Chemical Accidental Release Program. The Permittee does not meet the applicability standards for Accidental Release Prevention Provisions under 40 CFR Part 68. Permittee has a general duty to: identify hazards which may result from accidental releases using appropriate hazard assessment techniques; to design and maintain a safe facility taking such steps as are necessary to prevent releases; and to minimize the consequences of accidental releases that do occur. [Clean Air Act §112(r)(1)]

14. Stratospheric Ozone Protection.

a. The Permittee shall comply with applicable standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for Motor Vehicle Air Conditions (MVACs) in Subpart B:
   i. Persons opening appliances for maintenance, service, repair or disposal must comply with the required practices pursuant to § 82.156.
   ii. Equipment used during the maintenance, service, repair or disposal must comply with the standards for recycling and recovery equipment pursuant to § 82.158.
   iii. Persons performing maintenance, service, repair or disposal of appliances must be certified by an approved technical certification program pursuant to § 82.161.
   iv. Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with recordkeeping requirements pursuant to § 82.166 ("MVAC-like appliance" is defined at § 82.152.)
   v. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to § 82.156.
   vi. Owners/operators of appliances normally containing 50 or more pounds or refrigerant purchased and added to such appliances pursuant to § 82.166.
b. Permittee may switch from any ozone-depleting substance to any alternative approved pursuant to the Significant New Alternatives Program (SANP), 40 CFR Part 82, Subpart G, without a permit revision but shall not switch to a substitute listed as unacceptable pursuant to such program. [40 CFR 82.174]
c. Any certified technician employed by Permittee shall keep a copy of their certification at their place of employment. [40 CFR 82.166(1)]
d. The following condition is **state only** and is not federally enforceable under the Clean Air Act: The Permittee shall not willfully release any regulated refrigerant and shall use refrigerant extraction equipment to recover regulated refrigerant that would otherwise be released into the atmosphere. [RCW 70A.15.6410(2), 6410(4)]

15. Insignificant Emission Units. The generally applicable requirements that apply to IEUs are WAC 173-405-040(5), WAC 173-400-040, WAC 173-400-050(1) & (3), and WAC 173-400-060. [WAC 173-401-530(2)(b)]

16. Volatile Organic Liquid Storage Vessels. The Permittee shall keep records showing the dimensions and capacities of all storage vessels having capacities greater than or equal to 75 cubic meters that are used to store volatile organic liquids and for which construction, reconstruction, or modification commenced after July 23, 1984. This does not apply to storage vessels with a capacity greater than or equal to 151 cubic meters storing a liquid with a maximum true vapor pressure less than 3.5 kilopascals (kPa), or with a capacity greater than or equal to 75 cubic meters but less than 151 cubic meters storing a liquid with a maximum true vapor pressure less than 15.0 kPa. These records are to be kept for the life of each storage vessel. [40 CFR 60.116b (a) and (b)]

17. Used Oil Burning. The following condition is **state-only** and is not federally enforceable under the Clean Air Act: The Permittee can burn used oil if it meets the standards prescribed in RCW 70A.15.4510(1). This condition shall not apply to used oil burned in space

heaters if the space heater has a maximum heat output of not greater than 0.5 million BTUs per hour or used oil burned in facilities permitted by Ecology. [RCW 70A.15.4510]

18. Asbestos. The Permittee shall comply with the applicable requirements of 40 CFR Part 61, Subpart M (asbestos NESHAP) and WAC 173-400-075 when conducting any renovation or demolition at the facility. [WAC 173-400-075]

19. New Source Review. The Permittee shall not construct new sources or make modifications required to be reviewed under WAC 173-400-110, WAC 173-400-560, WAC 173-400-720, WAC 173-400-820, or WAC 173-460-040 before the Permittee obtains written final approval from Ecology in accordance with those regulations, pays the appropriate fees required by WAC 173-455-120, and pays the cost of public notice described in WAC 173-400-171. [WAC 173-400-110; WAC 173-400-171; WAC 173-400-560; WAC 173-400-720; WAC 173-400-820; 173-460-040]

20. Replacement or Substantial Alteration of Emission Control Technology. The following condition is **state only** and is not federally enforceable under the Clean Air Act. Prior to replacing or substantially altering emission control technology subject to review under WAC 173-400-114, the permittee shall file for and obtain approval from Ecology according to that regulation. The permittee shall pay the appropriate fees required by WAC 173-455-100(4) prior to commencing construction. [WAC 173-400-114]

21. Nonroad Engines. The following condition is state only and is not federally enforceable under the Clean Air Act. Prior to installation or operation of a nonroad engine, as defined in WAC 173-400-030, the permittee shall meet the requirements of WAC 173-400-035. If the nonroad engine(s) has a cumulative maximum rated brake horsepower greater than 500, a notification of intent to operate will be submitted to Ecology. If the nonroad engine(s) has a cumulative maximum rated break horsepower greater than 2,000, the permittee will not operate the engine(s) unless Ecology issues written approval to operate.

MONITORING, RECORDKEEPING & REPORTING

Monitoring Requirements [WAC 173-401-630(5)(b)]

22. Unit-Specific Requirements. The Permittee shall conduct routine monitoring of emissions in accordance with the program of monitoring or testing required by specific emission unit conditions of this permit. [WAC 173-405-072].

23. Unavoidable Excess Emissions. This condition applies, where applicable, to excess emissions that are claimed to be unavoidable pursuant to WAC 173-400-107. The Permittee may include in its reports demonstrations that excess emissions were unavoidable, consistent with the requirements of WAC 173-400-107. The Permittee shall have the burden to prove that deviations from permit terms were unavoidable. Excess emissions that are unavoidable are excused and are not subject to penalty. [WAC 173-400-107]

    After the effective of WAC 173-400-109, the Permittee may include in its reports demonstrations that excess emissions were unavoidable, consistent with the requirements of WAC 173-400-109. The Permittee shall have the burden to prove that deviations from permit terms were unavoidable. Excess emissions that are unavoidable are not subject to penalty. Claim of unavoidable excess emissions does not apply to exceedance of an emission standard in 40 CFR Parts 60, 61, 62, 63, and 72, or Ecology's adoption by reference of these standards. [WAC 173-400-109]

24. Violation Duration. A violation of an emission limit is presumed to commence at the time of the testing, recordkeeping or monitoring indicating noncompliance, and to continue until the time of retesting, recordkeeping or monitoring that indicates compliance. This presumption may be defeated if credible evidence shows that the violation was of longer duration, that there were intervening days during which no violation occurred or that the violation was not continuing in nature. [42 U.S.C. 7413(e)(2)]. The Permittee may conduct monitoring or testing more frequently than required by this permit.

25. Insignificant Emission Units. The Permittee is not subject to any testing, monitoring, reporting, or recordkeeping for the insignificant emission units or activities listed. [WAC 173-401-530(2)(c)]

26. Representative Conditions. The Permittee must conduct stack tests during representative operating conditions unless required operating conditions during testing is otherwise specified. [40 CFR 60.8(c), 40 CFR 63.7(e), WAC 173-401-630(1), 40 CFR 70.6(c)(1)]

Recordkeeping Requirements

27. Monitoring Records. The Permittee shall keep records of any periodic and continuous monitoring required by this permit. These records shall include the following, where applicable:

a. The date, place as defined in requirement, and time of sampling or measurement;
b. The date(s) analysis were performed;
c. The company or entity that performed the analysis;
d. The analytical techniques or methods used;
e. The results of such analysis; and
f. The operating conditions existing at the time of sampling or measurement.

[WAC 173-401-615(2)(a); WAC 173-400-105; 40 CFR §60.49b(f) for Power Boiler No. 7 and Recovery Furnace No. 4]

28. Inspection Checklists. Where the Permittee is required to use and maintain an inspection checklist, the checklist must contain, at a minimum, the following information:

    a. The person conducting the inspection;
    b. The date/time of the inspection;
    c. Location of the inspection;
    d. The observations made during the inspection;
    e. Corrective actions taken if any; and
    f. The date and time corrective action was initiated and completed.

    [WAC 173-401-615(1)(b)]

29. Changes at Source. The Permittee shall keep records describing changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes. [WAC 173-401-724(5)]

30. Records Retention. The Permittee shall retain records of all required monitoring data and support information for a period of five (5) years from the date of monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all data from continuous monitoring instrumentation, and copies of all reports required by this permit. [WAC 173-401-615(2)(c)]

    Note: There is also a 2 year record retention requirement for Power Boiler No. 7 and Recovery Furnace No. 4. [40 CFR §60.49b(o)]

31. Recording Permit Deviations. The Permittee shall maintain a contemporaneous record of any deviation from the requirements of this permit. [WAC 173-401-615(3)(b)]

Reporting Requirements [WAC 173-401-520, -615(3), & -710]

32. Unit Reporting Requirements. In addition to any emission unit specific reporting requirements identified below, emission unit specific reporting requirements are identified in specific emission unit conditions of this permit.

33. Production Reporting. Report within 15 days of the end of each month average daily production of air-dried unbleached pulp. [WAC 173-405-072(4)]

34. Monthly Reports. Monitoring reports required by this permit must be submitted to Ecology within 15 days of the end of each calendar month. [WAC 173-405-072] The reports must clearly identify all instances of deviations from permit requirements. [WAC 173-401-615(3)(a)]

35. Source Testing Results. Results of source testing (including source test report) must be submitted to Ecology within 60 days of completion of each source test. [WAC 173-405-072]

    Source test reports must be submitted to Ecology electronically via EPA's Compliance and Emissions Data Reporting Interface (CEDRI). EPA's Electronic Reporting Tool (ERT) may be used for reporting source testing results in CEDRI. Alternate submittal format may be used upon Ecology approval.

    The following minimum information must be included in the source test report:

    a. General identification information for the facility, including a mailing address, the physical address, and the owner or operator or responsible official (where applicable) and their email address.

    b. Purpose of the test including the applicable regulation(s) and permit condition(s) requiring the test, the pollutant(s) and other parameters being measure, the applicable emission standard and any process parameter component, and a brief process description.

    c. Description of the emission unit tested including fuel burned, control devices, and vent characteristics; the appropriate source classification code (SCC; the permitted maximum process rate (where applicable); and the sampling location.

    d. Description of sampling and analysis procedures used and any modifications to standard procedures, quality assurance procedures and results, record of process operating conditions that demonstrate the applicable test conditions are met, and values for any operating parameters for which limits were being set during the test.

    e. Where a test method requires recording or reporting, the following shall be included: Record of preparation of standards, records of calibrations, raw data sheets for field sampling, raw data sheets for field and laboratory analyses, chain-of-custody documentation, and example calculations for reported results.

    f. Identification of the company conducting the performance test including the primary office address, telephone number, and the contact for the test program including their email address.

36. *Reserved*.

37. CEMS and COMS Data Assessment Report. For CEMS and COMS subject to 40 CFR Part 60, submit a Data Assessment Report (DAR) quarterly (postmarked by April 15th, July 15th, October 15th, and January 15th) with the Monthly Air Monitoring Report. Include data for the previous three calendar months. The report must contain:

    a. Source owner or operator.
    b. Identification and location of monitors in the CEMS or COMS.
    c. Manufacturer and model number of each monitor in the CEMS or COMS.
    d. Assessment of CEMS data accuracy and date of assessment as determined by the RATA, RAA, or CGA; the RA for the RATA; the A for the RAA or CGA; the RM results, the cylinder gas certified values; the CEMs responses, and calculations. If results show the CEMS to be out-of-control, report both the audit results showing the CEMS to be out-of-control and the results of the audit following corrective action.
    e. Assessment of COMS data accuracy as determined by the quarterly performance audit or annual zero alignment, COMS responses, and calculations. If results show the COMS to be out-of-control, report both the audit results showing the COMS to be out-of-control and the results of the audit following corrective action.
    f. A summary of CEMS out-of-control periods as determined by CDs.
    g. A summary of COMS out-of-control periods as determined by the daily zero drift and upscale drift checks.
    h. A summary of all corrective actions taken when CEMS or COMS was determined to be out-of-control.

    [40 CFR Part 60 Appendix F]

38. Emission Inventory. The Permittee shall submit an inventory of emissions, as specified in WAC 173-405-078, from the source each year no later than 105 days after the end of the calendar year. The Permittee shall maintain records of information necessary to substantiate any reported emissions. [WAC 173-405-078 and WAC 173-400-105(1)]

39. Greenhouse Gas Reporting. The following condition is state only and is not federally enforceable under the Clean Air Act.

    Reporting Schedule

    The Permittee must submit the report required under chapter 173-441 WAC to Ecology no later than March 31st of each calendar year for GHG emissions in the previous calendar year. [WAC 173-441-050(2)] Reporting requirements begin for calendar year 2012 and each subsequent calendar year. [WAC 173-441-050(2)(b)]

The report and certificate or representation must be submitted electronically in accordance with the requirements of WAC 173-441-050 and 173-441-060 and in a format specified by Ecology. [WAC 173-441-070]

Submit a revised annual GHG report within forty-five days of discovering that an annual GHG report previously submitted contains one or more substantive errors. [WAC 173-441-050(7)]

Reporting Content

Each annual GHG report shall contain the content specified in WAC 173-441-050(3). [WAC 173-441-050(3)]

Each GHG emission report and any other submission under this chapter 173-441 WAC shall be certified, signed, and submitted by the designated representative or any alternate designated representative in accordance with WAC 173-441-060 and 40 CFR §3.10, as adopted on October 13, 2005.

(a) Each such submission shall include the following certification statement signed by the designated representative or any alternate designated representative: "I am authorized to make this submission on behalf of the owners and operators of the facility or supplier, as applicable, for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment." [WAC 173-441-060(5)]

All requests, notifications, and communications to Ecology pursuant to chapter 173-441 WAC, other than submittal of the annual GHG report, shall be submitted to the following address: Greenhouse Gas Report, Air Quality Program, Department of Ecology, P.O. Box 47600, Olympia, WA 98504-7600. [WAC 173-441-100]

Emissions Calculations

Use the calculation methodologies specified in the relevant sections of chapter 173-441 WAC. Use the same calculation methodology throughout a reporting period unless you provide a written explanation of why a change in methodology was required. [WAC 173-441-050(4)]

Calibration and accuracy requirements

The Permittee must meet the applicable flow meter calibration and accuracy requirements of WAC 173-441-050(8). The accuracy specifications in this subsection do not apply where either the use of company records (as defined in WAC 173-441-020(3)) or the use of "best available information' is specified in an applicable subsection of WAC 173-441 to quantify fuel usage and/or other parameters. Further, the provisions of this subsection do not apply to stationary fuel combustion units that use the methodologies in 40 CFR Part 75 to calculate CO2 mass emissions. [WAC 173-441-050(8)]

Recordkeeping

Keep records as specified in WAC 173-441-050(6). Retain all required records for at least three years. The records shall be kept in an electronic or hard copy format (as appropriate) and recorded in a form that is suitable for expeditious inspection and review. Upon request by Ecology, the records required under this section must be made available to Ecology. Records may be retained offsite if the records are readily available for expeditious inspection and review. For records that are electronically generated or maintained, the equipment or software necessary to read the records shall be made available, or, if requested by Ecology, electronic records shall be converted to paper documents. [WAC 173-441-050(6)]

40. Permit Deviations/Excess Emissions. The Permittee shall promptly submit a report of any deviations from permit conditions.

    a. For purposes of this permit, submitting a report "promptly" means the following: (1) if the deviation presents a potential threat to human health or safety, the report shall be made as soon as possible but no later than 12 hours after the discovery of the deviation; (2) for other deviations, "promptly" means that the deviations are identified in the respective monthly report.
    b. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken. The Permittee may include in its reports demonstrations that excess emissions were unavoidable, consistent with the requirements of WAC 173-400-107.
    [WAC 173-401-615(3)(b) and WAC 173-400-107]

41. Certifications. Any application form, report, or compliance certification submitted pursuant to Chapter 173-401 WAC shall contain certification by a responsible official of truth, accuracy, and completeness. This certification and any other certification required under Chapter 173-401 WAC shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. [WAC 173-401-520]

42. Report Address. All reports, renewal applications, and compliance certifications required by this permit shall be submitted to:

    Department of Ecology
    Industrial Section
    P.O. Box 47600
    Olympia, WA 98504-7600

    Compliance certification shall also be submitted to:

    Environmental Protection Agency
    Air Operating Permits, Region 10
    1200 Sixth Avenue, OAQ-108
    Seattle, WA 98101-1128

43. Compliance Requirements/Certification.

    a. The Permittee shall continue to comply with applicable requirements with which the Permittee is in compliance;
    b. The Permittee shall meet applicable requirements that will become effective during the permit period on a timely basis;
    c. The Permittee shall submit a report to the Department of Ecology and to Region 10 of EPA 12 months after the effective date of this permit and annually thereafter, within 45 days after the close of the year the certification covers, certifying compliance with the terms and conditions contained in this permit. The certification shall describe the following:
        i. the permit term or condition that is the basis of the certification;
        ii. the compliance status;
        iii. whether compliance was continuous or intermittent; and
        iv. the methods used for determining compliance, currently and over the reporting period consistent with required monitoring.

    Note: A report filed in a format approved by Ecology is deemed to meet the requirements of this condition.

44. Where a permit does not require testing, monitoring, recordkeeping and reporting for insignificant emissions units or activities, the permittee may certify continuous compliance if there were no observed, documented, or known instances of noncompliance during the reporting period. [WAC 173-401-530(2)(d), WAC 173-401-510(2)(h)(iii), and WAC 173-401-630(5)]

45. Calibration of CPMS: Unless otherwise specified, any CPMS used to show compliance with a permit condition shall be calibrated once per calendar year or as recommended by the manufacturer. Records of calibration must be kept for 5 years [40 CFR 70.6(c)(1)].

STANDARD TERMS & CONDITIONS

46. Duty to Comply. The Permittee must comply with all conditions of this chapter 401 permit. Any permit noncompliance constitutes a violation of Chapter 70A.15 RCW and, for federally enforceable provisions, a violation of the FCAA. Such violations are grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. [WAC 173-401-620(2)(a)]

47. Need to Halt or Reduce Activity Not a Defense. It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. [WAC 173-401-620(2)(b)]

48. Permit Actions. This permit may be modified, revoked, reopened, and reissued or terminated for cause. The filing of a request by the Permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. [WAC 173-401-620(2)(c)]

49. Property Rights. This permit does not convey any property rights of any sort, or any exclusive privilege. [WAC 173-401-620(2)(d)]

50. Duty to Provide Information. The Permittee shall furnish to the permitting authority, within a reasonable time, any information that the permitting authority may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the Permittee shall also furnish to the permitting authority copies of records required to be kept by the permit or, for information claimed to be confidential, the Permittee may furnish such records directly to the EPA administrator along with a claim of confidentiality. Permitting authorities shall maintain confidentiality of such information in accordance with RCW 70A.15.2510. [WAC 173-401-620(2)(e)]

51. Permit Fees. The Permittee shall pay fees as a condition of this permit in accordance with Ecology's fee schedule. Failure to pay fees in a timely fashion shall subject the Permittee to civil and criminal penalties as prescribed in Chapter 70A.15 RCW. [WAC 173-401-620(2)(f)]

52. Emissions Trading. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in this permit. [WAC 173-401-620(2)(g)]

53. Severability Clause. If any provision of this permit is held to be invalid, all unaffected provisions of the permit shall remain in effect and be enforceable. [WAC 173-401-620(2)(h)]

54. Permit Appeals. The Permittee may appeal this permit or any conditions in it only by filing an appeal with the pollution control hearings board and serving it on the permitting authority within thirty days of receipt pursuant to RCW 43.21B.310. This provision for

appeal in this section is separate from and additional to any federal rights to petition and review under § 505(b) of the FCAA. [WAC 173-401-620(2)(i)]

55. Permit Continuation. This permit and all terms and conditions contained therein, including any permit shield provided under WAC 173-401-640, shall not expire until the renewal permit has been issued or denied if a timely and complete application has been submitted. [WAC 173-401-620(2)(j)]

56. Application and Issuance of a Renewal Permit. The Permittee shall submit a complete permit renewal application to Ecology no later than six months, but no earlier than 18 months, prior to the expiration date of the existing permit. Permits being renewed are subject to the same procedural requirements, including those for public participation, affected state and EPA review that apply to the initial permit. [WAC 173-401-710(1)&(2)]

57. Inspection and Entry. The Permittee shall allow the permitting authority or an authorized representative to perform the following upon presentation of credentials and other documents as may be required by law:

    a. Enter upon the Permittee's premises where a chapter 401 source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;
    b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
    c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
    d. As authorized by WAC 173-400-105 and the FCAA, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.
    [WAC 173-401-630(2)]

58. Federally Enforceable Requirements. All terms and conditions of this permit, including any provisions designed to limit potential to emit, are enforceable by EPA and citizens under the FCAA, unless they are specifically designated as not federally enforceable. [WAC 173-401-625]

59. Reopening for Cause. This permit shall be reopened and revised under any of the following circumstances:

    a. Additional applicable requirements become applicable when the remaining permit term is greater than three years. Such reopening shall be completed not later than 18 months after promulgation of the applicable requirement.
    No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions have been extended pursuant to WAC 173-401-620(2)(j).

b. Additional requirements (including excess emissions requirements) become applicable under the acid rain program. Upon approval by EPA, excess emissions offset plans shall be deemed to be incorporated in the permit.
c. Ecology determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or
d. Ecology determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

Procedures to reopen and issue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. [WAC 173-401-730]

60. Tampering and False Statements. No person shall make any false material statement, representation or certification in any form, notice or report required in this permit. No person shall render inaccurate any monitoring device or method required under this permit. [WAC 173-400-105(6) and (8) and 40 CFR 70.11(a)]

61. Providing Additional Data. For Ecology to evaluate a plant's emissions or emission control program, the Permittee shall furnish other data requested by Ecology. [WAC 173-405-072(5)]

PERMIT SHIELD

Pursuant to WAC 173-401-640(1), compliance with the terms and conditions of this permit shall be deemed compliance with the applicable requirements identified in this permit, as of the date of permit issuance. This permit shield does not exempt the Permittee from requirements enacted after the permit issuance date. This permit shield shall not apply to any insignificant emission unit or activity designated under WAC 173-401-530. [WAC 173-401-530(3)]

Pursuant to WAC 173-401-640(2), the Department of Ecology has determined that the requirements listed below do not apply to the facility, as of the date of permit issuance, for the reasons specified.

APPENDIX A – Permit Shield/Inapplicable Requirements

The following requirements do not apply to the facility as of the date of permit issuance for the reasons indicated:

Emission Unit	Citation	Brief Description	Reason
Power Boiler No.6	40 CFR Part 60 Subpart D, Standards of Performance for Fossil-Fuel-Fired Industrial Steam Generators (construction or modification commenced after 8/17/71)	Applies to the following types of fossil fuel-fired generating units for which construction or modification commenced after August 17, 1971: fossil fuel-fired units of > 250 million Btu/hour heat input; fossil fuel/wood residue fired units capable of firing fossil fuel at a heat input rate of > 250 million Btu/hour (73 MW). 40 CFR §60.40(a).	Facility's Power Boiler No.6 does not exceed 250 million BTU/hr and was installed before 7/17/71.
Power Boiler No.7	40 CFR 60.42b(a)	Applies to subpart Db facility combusting coal or oil; SO_2 90% reduction requirement.	Not applicable to Power Boiler No.7 because they have a federally enforceable permit limit annual capacity of oil to 30% or less per 40 CFR 60.42b(d)(1).
Power Boiler No.7	40 CFR 60.43b(b)	Particulate limit for subpart Db facility that combusts oil or mixtures of oil w/ other fuels and uses conventional or emerging technology to reduce SO_2 emissions.	Facility does not use emerging technology for particulate control.
Power Boiler No.7	40 CFR 60.44b(b)	Establishes procedures for setting NO_X limits for facility that simultaneously combusts mixtures of coal, oil or natural gas.	The Power Boiler No.7 is physically incapable of co-firing gas and oil and is prohibited from firing coal without first obtaining approval through NSR.
Power Boiler No.7	40 CFR 60.44b(c)	Establishes procedures for setting NO_X limits, but does not apply if the unit is subject to a federally enforceable annual capacity factor of ≤ 10% for oil.	Power Boiler No.7 is subject to a federally enforceable 10% oil limit.

Emission Unit	Citation	Brief Description	Reason
Power Boiler No.7	40 CFR 60.49b(e)	Applies to subpart Db facilities that combust residual fuel and meets criteria under 40 CFR 60.46b(e), 60.44b(j) or (k).	Power Boiler No.7 does not meet the criteria for applicability.
Facility-Wide	40 CFR 60.112b, 113b,115b, 116b (c), (d), (e), (f), and (g)	Applies to storage vessels containing volatile organic liquids (VOL's) for which construction, reconstruction, or modification commenced after July 23, 1984, if they exceed specified capacities and VOL vapor pressures.	Facility does not have any vessels constructed, reconstructed, or modified after July 23, 1984 that meet the qualifying criteria.
Power Boiler No. 7, Power Boiler No. 6	40 CFR Part 60 Subpart Dc Performance Standards for Small Industrial-Commercial-Institutional Steam Generating Units	Applies to steam generating units for which construction, modification or reconstruction commenced after June 9, 1989, and that has a maximum design heat input capacity less than or equal to 100 million Btu/hour (29 MW), but greater than 10 million Btu/hour (2.9 MW). (40 CFR §60.40c(a)).	Facility's Power Boiler No.6 is greater than 100 million BTU/hr and was installed before 6/9/89. Facility's Power Boiler No.7 is greater than 100 million BTU/hr.
Smelt Tanks Nos. 4E and 4W	40 CFR Part 60.282 (a)(2) 40 CFR Part 60.283(a)(4)	PM and TRS standards which apply to smelt dissolving tanks modified or constructed after 1976.	Smelt Tanks Nos. 4E and 4W were constructed in 1972 and have not been modified.
Lime Kilns Nos. 1 and 2	40 CFR Part 60.282 (a)(3) 40 CFR Part 60.283 (a)(5)	PM and TRS standards which apply to lime kilns modified or constructed after 1976.	Lime Kilns Nos. 1 and 2 were constructed in 1960 and 1972 respectively and have not been modified.
Facility-Wide	WAC 173-400-040	Meet most restrictive standard where 2 or more units are connected to a common stack, and unit-specific emissions data is not provided.	Facility does not have any emission units with different emission limits connected to a common stack.
Facility-Wide	WAC 173-400-040(1)	No visible emissions over 20% opacity for 3 minutes in any one hour, with 4 exceptions.	Opacity standards in the Kraft Pulping Mill regulations (WAC 173-405) take precedence over

Emission Unit	Citation	Brief Description	Reason
			the general emission standards of WAC 173-400.
Facility-Wide	WAC 173-400-040(3)(b)	Emissions unit identified as a significant contributor to nonattainment must use reasonable and available control methods to control emissions of contaminants for which area is designated nonattainment.	No emissions units at the facility have been identified as a significant contributor to nonattainment.
Facility-Wide	WAC 173-400-040(6)	General limit of 1,000 ppmdv SO_2.	SO_2 standards for emissions units at kraft pulping mills in the Kraft Pulping Mill regulations (WAC 173-405) take precedence over the general emission standards of WAC 173-400.
Facility-Wide	WAC 173-400-040(8)(b)	Sources of fugitive dust identified as significant contributors to a PM-10 nonattainment area must use RACT to control fugitive dust emissions.	Facility was not listed as an Industrial Fugitive Source of PM-10 in the SIP for PM in the Tacoma Tideflats, Nov. 1991.
Power Boiler No.6, Power Boiler No.7, Recovery Furnace No.4	WAC 173-400-050(1)	No particulate emissions in excess of 0.2 grain/dscf from combustion units.	Particulate standards for combustion sources in the Kraft Pulping Mill regulations (WAC 173-405) take precedence over the general emission standards of WAC 173-400.
Power Boiler No.7, Recovery Furnace No.4	WAC 173-400-050(1)	No particulate emissions in excess of 0.1 grain/dscf from units combusting wood derived fuels for production of steam.	Particulate standards for combustion sources in the Kraft Pulping Mill regulations (WAC 173-405) take precedence over the general emission standards of WAC 173-400.
Power Boiler No.7	WAC 173-400-070(2)(a)	Hog fuel boilers must meet all requirements of WAC 173-400-040 & -050(1), with exceptions.	Specific emission standards for combustion sources in the Kraft Pulping Mill regulations (WAC 173-405) take precedence over

Emission Unit	Citation	Brief Description	Reason
			the general emission standards of WAC 173-400.
Facility-Wide	WAC 173-400-100 Registration	Registration required for listed sources, excluding sources subject to the operating permit program, after EPA grants interim or final approval to the state program.	Facility is subject to the operating permit program.
Power Boiler No.7 Power Boiler No.6	WAC 173-400-105(5)(a)	Continuous opacity & SO_2 monitoring & recording required for fossil fuel-fired steam generators that are not subject to an NSPS, except where capacity is less than 250 million BTU/hr heat input or where there is an annual avg capacity factor of greater than or equal to 30%.	Power Boiler No.7 is subject to an NSPS; Power Boiler No.6 has a heat input capacity of less than 250 million BTU/hr.
Power Boiler No.7 Power Boiler No.6	WAC 173-400-105(5)(d)	Continuous opacity monitoring & recording required for wood residue fuel-fired steam generators w/ capacity of greater than or equal to 100 million BTU/hr heat input that are not subject to an NSPS.	Power Boiler No.7 is subject to an NSPS; Power Boiler No.6 does not fire wood residue fuel.
Facility-Wide	WAC 173-400-151 Retrofit requirements for visibility protection	BART required for sources to which significant visibility impairment of a Class 1 area is reasonably attributable.	Facility has not been identified as a source impacting a Class I area.
Power Boiler No.6	WAC 173-400-210 Emission requirements of prior jurisdictions	Requires adherence to emission limitations if more restrictive than those of current authority.	PSAPCA particulate limitations applicable to Power Boiler No.6 were not more restrictive than Ecology particulate limitations.
Facility-Wide	Chapter 173-410 WAC; Sulfite Pulping Mills		Facility is not a sulfite pulping mill

Emission Unit	Citation	Brief Description	Reason
Facility-Wide	Chapter 173-433 WAC; Solid Fuel Burning Devices	Applies to wood stoves and fireplaces.	Facility does not operate such devices
Facility-Wide	WAC 173-435-050(2)	No open fires during an air pollution episode	Facility does not conduct open burning.
Facility-Wide	Chapter 173-490 WAC; Emission Standards and Controls for Sources of VOCs		Applies only to facility types specified in the regulation; pulp and paper mills are not specified
Facility-Wide	40 CFR 60 Subpart BBa	NSPS Standards for Kraft Pulp Mills (after May 23, 2013)	This standard does not apply to any sources at the Mill as modification, construction or reconstruction has not occurred since the applicable date.
Multiple Effect Evaporators, digester system, brownstock washer system	40 CFR 60.283(a)(1)	NSPS Standards for Kraft Pulp Mills	This standard does not apply to the multiple effect evaporators, the digester system, or the brownstock washer systems because they were not constructed or modified after September 24, 1976.
No.4 Recovery Furnace	40 CFR 60.42b	Standard for Sulfur Dioxide for Industrial-Commercial-Institutional Steam Generating Units	The furnace has not triggered the definition of a modification with respect to SO2.

APPENDIX B – Continuous Monitoring Recovery Requirements

1. Continuous Emission Monitoring System Operating Requirements (CEMS Required by an Order, PSD Permit, or Ecology Regulation).

Continuous emission monitoring systems (CEMS) required under an order, PSD permit, or regulation issued by a permitting authority and not subject to CEMS performance specifications and data recovery requirements imposed by 40 CFR Parts 60, 61, 62, 63, or 75 must meet the following CEMS performance specifications:

a. The owner or operator shall recover valid hourly monitoring data for at least 95 percent of the hours that the equipment (required to be monitored) is operated during each calendar month except for periods of monitoring system downtime, provided that the owner or operator demonstrated that the downtime was not a result of inadequate design, operation, or maintenance, or any other reasonable preventable condition, and any necessary repairs to the monitoring system are conducted in a timely manner.

b. The owner or operator shall install a continuous emission monitoring system that meets the performance specification in 40 CFR Part 60, Appendix B in effect at the time of its installation, and shall operate this monitoring system in accordance with the quality assurance procedures in Appendix F of 40 CFR Part 60 in effect on May 1, 2012, and the U.S. Environmental Protection Agency's "Recommended Quality Assurance Procedures for Opacity Continuous Monitoring Systems" (EPA) 340/ 1-86-010.

c. Monitoring data commencing on the clock hour and containing at least forty-five minutes of monitoring data must be reduced to one hour averages. Monitoring data for opacity is to be reduced to six minute block averages unless otherwise specified in the order of approval or permit. All monitoring data will be included in these averages except for data collected during calibration drift tests and cylinder gas audits, and for data collected subsequent to a failed quality assurance test or audit. After a failed quality assurance test or audit, no valid data is collected until the monitoring system passes a quality assurance test or audit.

d. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required under subsection (a) of this section, all continuous monitoring systems shall be in continuous operation.

    i. Continuous monitoring systems for measuring opacity shall complete a minimum of one cycle of sampling and analyzing for each successive ten second period and one cycle of data recording for each successive six minute period.

ii. Continuous monitoring systems for measuring emissions other than opacity shall complete a minimum of one cycle of sampling, analyzing, and recording for each successive fifteen minute period.

e. The owner or operator shall retain all monitoring data averages for at least five years, including copies of all reports submitted to the permitting authority and records of all repairs, adjustments, and maintenance performed on the monitoring system.

f. The owner or operator shall submit a monthly report (or other frequency as directed by terms of an order, air operating permit or regulation) to the permitting authority within thirty days after the end of the month (or other specified reporting period) in which the data were recorded. The report required by this section may be combined with any excess emission report required by WAC 173-400-107 or -108, whichever is in effect at the time of the excess emissions. This report shall include:

i. The number of hours that the monitored emission unit operated each month and the number of valid hours of monitoring data that the monitoring system recovered each month;

ii. The date, time period, and cause of each failure to meet the data recovery requirements of (a) of this subsection and any actions taken to ensure adequate collection of such data;

iii. The date, time period, and cause of each failure to recover valid hourly monitoring data for at least 90 percent of the hours that the equipment (required to be monitored) was operated each day.

iv. The results of all cylinder gas audits conducted during the month; and

v. A certification of truth, accuracy, and completeness signed by an authorized representative of the owner or operator.

[WAC 173-400-105(7)]

2. <u>MACT CMS Data Recovery</u>.

Except for system breakdowns, out-of-control periods, repairs, maintenance periods, calibration checks, and zero (low-level) and high calibration drift adjustments, all CMS, including COMS and CEMS shall be in continuous operation and shall meet minimum frequency of operation requirements:

a. All COMS shall complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.

b. All CEMS for measuring emissions other than opacity shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

[40 CFR 63.8(c)(4)]

The Permittee shall make every effort to acquire, maintain, and recover valid monitoring data. CMS downtime and resulting monitoring data loss due to malfunctions shall be less than 10% of the monthly unit operating time. An explanation for the loss of monitoring data must be provided in the monthly report. Periods when CMS data is not recovered due to daily calibration, zero and span checks are not considered nor reported as CMS downtime in the monthly report. Records of daily calibration, zero and span checks shall be kept for a period of five years and made available upon request to Ecology. [40 CFR 70.6(c)(1)]

The Permittee shall record and report CMS downtime in the semi-annual MACT report, or more frequently if required by Ecology. [40 CFR 63.10(e)]

3. NSPS CMS Data Recovery.

Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required under 40 CFR 60.13(d), all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements:

a. All continuous monitoring systems referenced by 40 CFR 60.13(c) for measuring opacity of emissions shall complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.

b. All continuous monitoring systems referenced by paragraph 40 CFR 60.13(c) of this section for measuring emissions, except opacity, shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

[40 CFR 60.13(e)]

The Permittee shall make every effort to acquire, maintain, and recover valid monitoring data. CMS downtime and resulting monitoring data loss due to malfunctions shall be less than 10% of the monthly unit operating time. An explanation for the loss of monitoring data must be provided in the monthly report. Periods when CMS data is not recovered due to daily calibration, zero and span checks are not considered nor reported as CMS downtime in the monthly report. Records of daily calibration, zero and span checks shall be kept for a period of five years and made available upon request to Ecology. [40 CFR 70.6(c)(1)]

The Permittee shall record and report CMS downtime in the monthly report. [40 CFR 60.7(c) and (d) (2/12/99)]

APPENDIX C – PM10 Calculations

Calculation procedures for determining compliance with the daily PM-10 limit on industrial stack sources at the facility (from Order DE 95AQ-I006).

1. Use the following procedures to determine whether the industrial stack sources are in compliance with the 1671 kg/day PM-10 limit on a daily basis. Calculate kilograms per day of PM-10 using the procedures described below.

    a. For determining daily PM-10 emissions from an emission unit for the day upon which a total suspended particulate (TSP) emission test is conducted at that unit, use:

        i. the results of the source test for that unit;

        ii. the associated throughput parameters (1.c.) for the test; and

        iii. the PM-10 ratio as measured during the test, or if not measured during that test, then as specified in 1.d. below

    b. For determining daily PM-10 emissions from an emission unit for a day upon which no emission test is conducted at that unit, utilize a parametric factor that correlates mass of PM-10 emitted to throughput, developed as follows. Use:

        i. the most recent total suspended particulate (TSP) emission test data available and following Department of Ecology guidance regarding requirements for a representative test;

        ii. the associated throughput parameters (1.c.) for that test; and

        iii. Kilograms per day of PM-10 as specified in 1.d. below.

    c. The throughput parameters utilized shall be as follows: gallons per day of black liquor ("BL") fired for Recovery Furnace No. 4, and Smelt Tanks Nos. 4E & 4W; gallons per day of lime mud ("LM") fed for Lime Kilns Nos. 1 and 2; and pounds of steam produced per day for Power Boiler No. 6 and Power Boiler No. 7.

        i. The following ratios developed from source test data, shall be used to determine the PM10 component of TSP emissions from each source: Recovery Furnace No. 4, 0.497; Lime Kiln No. 1, 1.0; Lime Kiln No. 2, 1.0; Smelt Tank No. 4E, 1.0; Smelt Tank No. 4W, 0.901.0; Power Boiler No. 6, 1.0 for natural gas, 0.858 for oil; Power Boiler No. 7, 0.73. If a more accurate ratio for any of these units is determined by source test and approved by Department of Ecology, it can be substituted without amending this order.

ii. For the Recovery Furnaces, Smelt Tanks and Lime Kilns, the parametric factor shall be calculated, using the most recent source test data available, as follows:

$$\frac{lbs\ TSP\ *}{day} \times \frac{1}{gpm} \times \frac{0.4536}{1440} \times PM10\ ratio = \frac{PM10\ kg\ /\ day}{gal\ /\ day\ BL\ or\ LM}$$

For the Power Boilers, the parametric factor shall be calculated as follows:

$$\frac{lbs\ TSP\ *}{day} \times \frac{1}{10^3\ lbs} \times 0.4536 \times PM10\ ratio = \frac{PM10\ kg\ /\ day}{10^3\ lbs\ steam\ /\ day}$$

* lbs. TSP/hour during the source test times 24 hours per day.

iii. The kg/day of PM-10 for each industrial stack source shall be calculated by multiplying the parametric factor times the following daily variables: gallons of black liquor per day for Recovery Furnace No. 4 and Smelt Tank vents 4E and 4W; gallons of lime mud per day for Lime Kilns Nos. 1 and 2; and 103 pounds of steam produced per day for Power Boiler No. 6 and Power Boiler No. 7.

iv. The total PM-10 in kg/day for all industrial stack sources at the Mill shall be calculated by adding together the kg/day of PM-10 for each industrial stack source as calculated pursuant to 1.a. and 1.b. above.

2. Monitoring, recordkeeping and reporting.

a. The test method shall be Department of Ecology Method 5 for all units, except that Department of Ecology Method 8 shall be used for Smelt Tanks Nos. 4E & 4W, and may be used as an alternate for Lime Kilns Nos. 1 and 2.

b. Reporting frequency shall be monthly for all units. Monthly reports shall report daily cumulative PM10 emissions from industrial stack sources at WestRock in terms of kg/day, as calculated pursuant to Section 1 of this Appendix.

c. Records of the calculations required by this Order, including specified parameter rates, shall be maintained and made available for inspection upon request. Records required by this Order shall be retained for a period of at least five years from the date of the calculation.

APPENDIX D - Reserved

APPENDIX E – Definitions of Abbreviations Used in Permit

Abbreviation	Definition
ADMT	air dry metric ton
avg	Average
BACT	Best available control technology
BART	Best available reasonable technology
BDMT	bone dry metric ton
BL	black liquor
BLS	black liquor solids
BTU	British thermal unit
CEMS	continuous emissions monitoring system
CFR	Code of Federal Regulations
CO	carbon monoxide
CPMS	continuous parametric monitoring systems
DOE	Department of Ecology
dscf	dry standard cubic foot
EPA	Environmental Protection Agency
ESP	electrostatic precipitator
FCAA	Federal Clean Air Act
gpm	gallons per minute
gr	Grain
HAP	hazardous air pollutant
HVLC	High volume low concentration
IEU	insignificant emission unit
kg	Kilogram
lbs	Pounds
LM	lime mud
LVHC	Low volume high concentration
MACT	maximum available control technology
MMBTU	million British thermal units

Abbreviation	Definition
NO_X	oxides of nitrogen
NCG	Non-condensable gas
NESHAP	National Emission Standards for Hazardous Air Pollutants
NSPS	new source performance standards
PM	particulate matter
PM-10	particulate matter less than 10 microns in diameter
ppm	parts per million
ppmdv	part per million dry volume
RACT	Reasonable available control technology
SERP	source emission reduction plan
SIP	state implementation plan
SO_2	sulfur dioxide
tpy	tons per year
TRS	total reduced sulfur
TSP	total suspended particulate
U.S.C.	United States Code
VOC	volatile organic compound
WAC	Washington Administrative Code

APPENDIX F – List of Existing Orders and Permits

NOC Order No. 15833 issued 8/13/2018. This permitted the chip thickness screening project which improved the transfer of wood chips and increase yields through improved efficiency. Screening system increased from 2,278 bone dry tons to 2,369 bone dry tons.

NOC Order No. 10948, issued 11/14/2014. This order approved a project to replace four existing refiners at No. 13 Paper Machine with two new high-efficiency refiners.

NOC Order No. 6161, issued 12/31/2008, allowed for up to 40% by weight of creosote treated wood in the fuel mix fed to the Power Boiler No. 7.

PSD-06-02 issued 5/27/2007. This permit approved the installation of a steam turbine generator which is driven by steam produced from Recovery Furnace No. 4 and Power Boiler No. 7.

PSD-06-02, Amendment 1 was issued 3/22/2016. Amendment 1 revised a NO_x limit for Power Boiler No. 7.

PSD-06-02 Amendment 2 was issued insert date. Amendment 2 reduced minimum stack testing frequency for particulate matter at Power Boiler No.7 from quarterly to annually. Stack testing duration at Power Boiler No.7 was increased from one to three hours. In Amendment 1, compliance was demonstrated using an average of three quarterly tests. In Amendment 2, the results of one test will determine compliance with the particulate limit.

NOC Order No. 4153-AQ07, issued 5/23/2007. This permit approved the same project as PSD-06-02: the installation of a steam turbine generator which is driven by steam produced from Recovery Furnace No. 4 and Power Boiler No. 7.

Order No. 4153-AQ07 was amended on insert date (concurrent with issuance of this AOP). The modification removed old opacity monitoring requirements which became inappropriate when an acid gas scrubber was installed on the Power Boiler No.7 stack in 2016. The opacity monitoring requirements were replaced with surrogate monitoring parameters. VOC stack testing frequency was reduced from annually to semiannually. Sulfur monitoring requirements were modified.

NOC Order No. DE 01AQIS-3114, issued 7/25/2001. This permit approved modification to Recovery Furnace No. 4. Two existing laminar air heaters were replaced with an economizer. This change allowed Recovery Furnace No. 4 to operate at capacity more hours per year.

Order No. DE 01AQIS-3114 was amended on insert date (concurrent with issuance of this AOP). Changes made to the order by reference in Order No. 1916-AQ05 were incorporated. This includes an update to a NOx emission algorithm. Stack testing frequency for VOCs at Recovery Furnace No.4 was reduced from semiannually to annually. Stack testing duration was increased from one to three hours.

NOC Order No. DE 99AQIS-94, issued 1/24/2000. This NOC order approved modifications to Recovery Furnace No. 4. Changes include the replacement of a direct contact black liquor

heater with an indirect liquor heater, and the installation of a third level of combustion air feed (tertiary air).

Order No. DE 99AQIS-94 was amended on insert date (concurrent with issuance of this AOP). Changes made to the order by reference in Order No. 1916-AQ05 were incorporated. This includes the removal of a NOx limit and algorithm which were superseded in subsequent NOC Orders and an update to an annual oil capacity calculation. The minimum testing frequency for particulate matter at Recovery Furnace No.4 was reduced from quarterly to annually.

Agreed Order No. DE 95-AQI006, issued 4/10/1995. This order established a daily mill-wide PM limit and also established procedures for determining compliance with the daily PM limit. The PM limit was in response to a revision to the SIP for PM in the Tacoma Tideflats area.

APPENDIX G – Testing Requirements

1. Tiered Testing Frequencies (M/Q/S/A)*:

The below tiered testing frequency allowance is applicable to those permit conditions which reference Appendix G, No.1.

Quarterly (Q): Quarterly testing must be conducted each calendar quarter between 45 and 105 days following the previous test, or as otherwise approved by Ecology. Calendar quarters are the respective periods of three consecutive calendar months starting on January 1, April 1, July 1, and October 1.

If the permittee is a testing on a quarterly cycle and any single source test result exceeds the emissions limitation, the source test frequency shall increase to monthly**. Monthly source testing shall commence within 60 days of the source test which exceeded the emissions limitation.

If quarterly source test results are less than or equal to 50% of the emissions limitation for four consecutive quarters, source testing may be performed on a semiannual basis.

Semiannual (S): Semiannual source testing must be conducted each calendar half between 4 and 8 months following the previous test, or as otherwise approved by Ecology. Calendar halves are the two respective periods of six consecutive calendar months beginning January 1st and July 1st.

If the permittee is testing on a semiannual cycle and any single source test result exceeds the emissions limitation, the source test frequency shall increase to monthly**. Monthly source testing shall commence within 60 days of the source test which exceeded the emissions limitation.

If the permittee is testing on a semiannual cycle and any single source test exceeds 50% of the emissions limitation, source test frequency shall revert to quarterly**. Quarterly source testing must commence the calendar quarter following the source test which exceeded 50% of the emission limit.

If semiannual source test results are less than or equal to 25% of the emissions limitation for four consecutive calendar halves, source testing may be performed on an annual basis. Previous consecutive quarterly testing below 25% of the emissions limitation may be counted towards the “four consecutive calendar halves.”

Annual (A): Annual source testing must be conducted each calendar year between 8 and 14 months following the previous test, or as otherwise approved by Ecology.

If the permittee is testing on an annual cycle and any single source test result exceeds the emissions limitation, the source test frequency shall increase to monthly**. Monthly source testing shall commence within 60 days of the source test which exceeded the emissions limitation.

If the permittee is testing on an annual cycle and any single source test exceeds 50% of the emissions limitation, source test frequency shall revert to quarterly**. Quarterly source testing must commence the calendar quarter following the source test which exceeded 50% of the emission limit.

If the permittee is testing on an annual cycle and any single source test exceeds 25% of the emissions limitation, source test frequency shall revert to semi-annually**. Semi-annual source testing must commence the calendar half following the source test which exceeded 25% of the emission limit.

Monthly (M): A source test must be performed in any month that the emission unit was operated more than 216 hours. If an emission unit is not operated for more than 216 hours in a month, a source test must be performed prior to the emissions unit having been operated a total of 720 hours since the end of the month of the last source test.

If monthly source test results are lower than the emissions limitation for 3 consecutive months, source testing may be performed on a quarterly basis. To qualify for quarterly source testing following an exceedance of an emissions limitation, the first of the three monthly tests with measured emissions less than the emissions limitation must not occur in the same calendar month as an emissions exceedance.

*If an emissions unit is not in operation for 180 consecutive days, the emission unit must perform a stack test within 30 days of start-up, unless otherwise approved by Ecology. Testing must begin at a quarterly frequency, unless otherwise approved by Ecology.

** Unless otherwise approved by Ecology when source test results for tests which are not subject to Appendix G, No.1 are compared to limits which are subject to testing requirements under Appendix G, No.1.

2. 40 CFR Part 63 Subpart MM Testing

Sample every five years. The first of the 5-year periodic performance tests must be conducted by October 13, 2020 and thereafter within 5 years following the previous performance test [40 CFR 63.863(c)].

Notify Ecology 60 calendar days before the performance test is scheduled to begin [40 CFR 63.9(e) and 40 CFR 63.7(b)].

Before conducting a required performance test, the owner or operator of an affected source shall develop and, if requested by the Administrator, shall submit a site-specific test plan to the Administrator for approval. The test plan shall include a test program summary, the test schedule, data quality objectives, and both an internal and external quality assurance (QA) program. Data quality objectives are the pretest expectations of precision, accuracy, and completeness of data [40 CFR 63.7(c)(2)].

A site-specific test plan shall be submitted 60 calendar days before the performance test is required to take place, simultaneously with the notification of the intention to conduct a performance test [40 CFR 63.7(c)(2)(iv)].

The performance test must be done under normal operating conditions [40 CFR 63.865].

The Permittee must maintain records of [40 CFR 63.865, 40 CFR 63.866]:

1. All results of performance tests;
2. The process information that is necessary to document operating conditions during the test and include in such record an explanation to support that such conditions represent normal operation;
3. Documentation of supporting calculations for compliance determinations made under 40 CFR 63.865(a) through (d);
4. For each failure to meet the emission limit, the number of failures, the date, start time, and duration of each event;
5. For any failure to meet the emission limit, record an estimate of the quantity of each regulated pollutant emitted over the emission limit and a description of the method used to estimate the emissions.
6. For any failure to meet the emission limit, record actions taken to minimize emissions in accordance with 40 CFR 63.860(d) and any corrective actions taken to return the affected unit to its normal or usual manner of operation.
7. Records of parameter operating limits established for each affected source or process unit.

Report failures to meet the applicable standard in the *Semi-annual Excess Emissions and Continuous Monitoring Systems Performance Report* or *Summary Report* in accordance with 40 CFR 63.867(c)(4), delivered or postmarked by the 30th day following the end of each calendar half.

Submit results through CEDRI 60 days after completing each performance test [40 CFR 63.867(c)(4) and (d)].

3. 40 CFR Part 63 Subpart DDDDD Testing

Develop a site-specific test plan than will be made available to Ecology upon request [40 CFR 63.7520(a)].

Test Annually/Triennially. If a performance test for a given pollutant for at least 2 consecutive years is at or below 75% of the emission limit and if there are no changes in the operation of the boiler that could increase emissions, performance testing frequency can be reduced to once every third year. If the performance testing results exceed 75 percent of the limit, the Permittee must return to annual performance testing. Annual performance tests must be completed no more than 13 months after the previous performance test and triennial tests must be performed no later than 37 months after the previous test. The reduced monitoring frequency only applies if the facility is not averaging emissions between multiple units [40 CFR 63.7515(a)(b), and (c)].

Submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin [40 CFR 63.7545(d)].

A site-specific test plan shall be submitted 60 calendar days before the performance test is required to take place, simultaneously with the notification of the intention to conduct a performance test [40 CFR 63.7(c)(2)(iv)].

Report results of the performance test and associated fuel analyses within 60 days after the completion of the performance test to CEDRI in accordance with 63.7550(h). ERT must be used if the test method is supported by ERT. The report must also verify that that the operating limits for boiler have not changed or provide documentation of revised operating limits established according to 63.7530 and Table 7 to Part 63 Subpart DDDDD, as applicable [40 CFR 63.7550(h), 40 CFR 63.7515(f)].

The Permittee must keep records of the performance test as required by 63.10(b)(2)(viii) and in accordance with 63.7560 [40 CFR 63.7555(a)(2), 40 CFR 63.7560].

4. 40 CFR Part 63 Subpart S Testing

Sample every five years for emission sources subject to the limitations in 40 CFR 63.443, 63.444, 63.445. The first of the 5-year periodic performance tests must be conducted by September 7, 2015 and thereafter within 60 months following the previous performance test [40 CFR 63.457(a)(2)].

Notify Ecology 60 calendar days before the performance test is scheduled to begin [40 CFR 63.9(e) and 40 CFR 63.7(b)].

Before conducting a required performance test, the owner or operator of an affected source shall develop and, if requested by the Administrator, shall submit a site-specific test plan to the Administrator for approval. The test plan shall include a test program summary, the test schedule, data quality objectives, and both an internal and external quality assurance (QA) program. Data quality objectives are the pretest expectations of precision, accuracy, and completeness of data [40 CFR 63.7(c)(2)].

A site-specific test plan shall be submitted 60 calendar days before the performance test is required to take place, simultaneously with the notification of the intention to conduct a performance test [40 CFR 63.7(c)(2)(iv)].

To determine vent gas concentrations performance test must be done under normal operating conditions [40 CFR 63.457(b)(5)].

Submit results through CEDRI 60 days after completing each performance test. Unless otherwise approved by the Administrator in writing, results of a performance test shall include the analysis of samples, determination of emissions and raw data. A complete test report must include the purpose of the test; a brief process description; a complete unit description, including a description of feed streams and control devices; sampling site description; pollutants measured; description of sampling and analysis procedures and any modifications to standard procedures; quality assurance procedures; record of operating conditions, including operating parameters for which limits are being set, during the test; record of preparation of standards; record of calibrations; raw data sheets for field sampling; raw data sheets for field and laboratory analyses; chain-of-custody documentation; explanation of laboratory data qualifiers; example calculations of all applicable stack gas parameters, emission rates, percent reduction rates, and analytical results, as applicable; and any other information required by the test method and the Administrator [40 CFR 63.455(h)(1) through (4)].